ORDER NO. VMD9802005C8

Service Manual

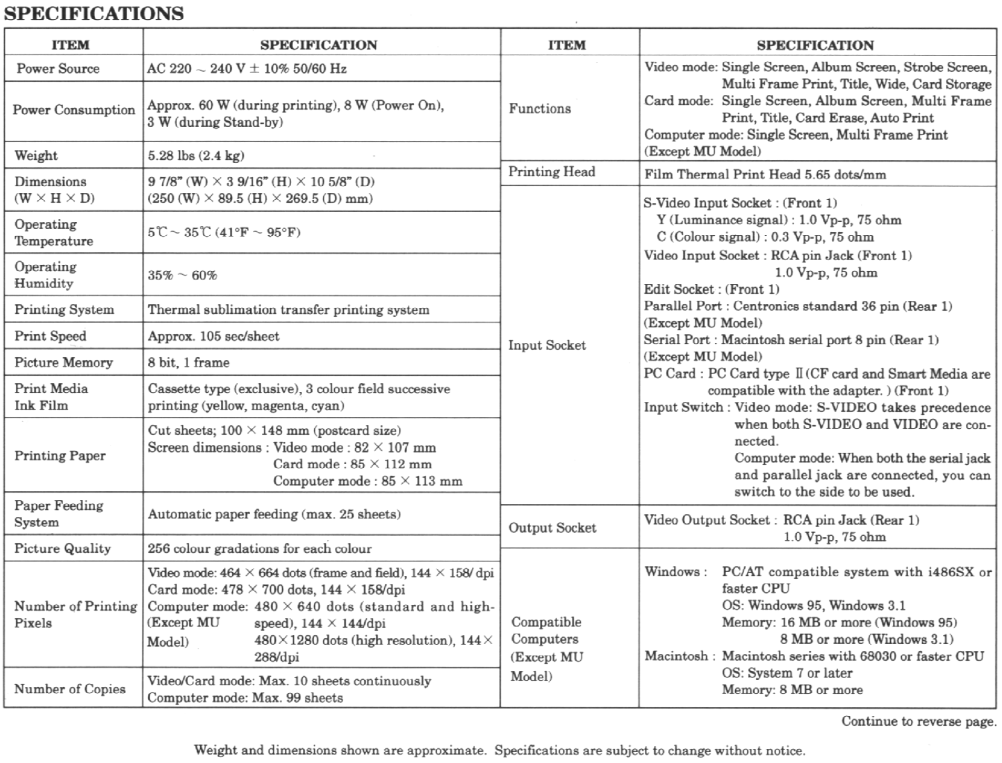
Digital Video Printer

Panasonic

NV-MPD1

E/B/EN/MU

SPECIFICATIONS



SPECIFICATIONS

ITEM	SPECIFICATION
Power Source	AC 220 ~ 240 V ± 10% 50/60 Hz
Power Consumption	Approx. 60 W (during printing), 8 W (Power On), 3 W (during Stand-by)
Weight	5.28 lbs (2.4 kg)
Dimensions (W × H × D)	9 7/8" (W) × 3 9/16" (H) × 10 5/8" (D) (250 (W) × 89.5 (H) × 269.5 (D) mm)
Operating Temperature	5℃ ~ 35℃ (41°F ~ 95°F)
Operating Humidity	35% ~ 60%
Printing System	Thermal sublimation transfer printing system
Print Speed	Approx. 105 sec/sheet
Picture Memory	8 bit, 1 frame
Print Media Ink Film	Cassette type (exclusive), 3 colour field successive printing (yellow, magenta, cyan)
Printing Paper	Cut sheets; 100 × 148 mm (postcard size) Screen dimensions : Video mode : 82 × 107 mm Card mode : 85 × 112 mm Computer mode : 85 × 113 mm
Paper Feeding System	Automatic paper feeding (max. 25 sheets)
Picture Quality	256 colour gradations for each colour
Number of Printing Pixels	Video mode: 464 × 664 dots (frame and field), 144 × 158/ dpi Card mode: 478 × 700 dots, 144 × 158/dpi Computer mode (Except MU Model): 480 × 640 dots (standard and high-speed), 144 × 144/dpi 480×1280 dots (high resolution), 144×288/dpi
Number of Copies	Video/Card mode: Max. 10 sheets continuously Computer mode: Max. 99 sheets

ITEM	SPECIFICATION
Functions	Video mode: Single Screen, Album Screen, Strobe Screen, Multi Frame Print, Title, Wide, Card Storage Card mode: Single Screen, Album Screen, Multi Frame Print, Title, Card Erase, Auto Print Computer mode: Single Screen, Multi Frame Print (Except MU Model)
Printing Head	Film Thermal Print Head 5.65 dots/mm
Input Socket	S-Video Input Socket : (Front 1) Y (Luminance signal) : 1.0 Vp-p, 75 ohm C (Colour signal) : 0.3 Vp-p, 75 ohm Video Input Socket : RCA pin Jack (Front 1) 1.0 Vp-p, 75 ohm Edit Socket : (Front 1) Parallel Port : Centronics standard 36 pin (Rear 1) (Except MU Model) Serial Port : Macintosh serial port 8 pin (Rear 1) (Except MU Model) PC Card : PC Card type Ⅱ (CF card and Smart Media are compatible with the adapter.) (Front 1) Input Switch : Video mode: S-VIDEO takes precedence when both S-VIDEO and VIDEO are connected. Computer mode: When both the serial jack and parallel jack are connected, you can switch to the side to be used.
Output Socket	Video Output Socket : RCA pin Jack (Rear 1) 1.0 Vp-p, 75 ohm
Compatible Computers (Except MU Model)	Windows : PC/AT compatible system with i486SX or faster CPU OS: Windows 95, Windows 3.1 Memory: 16 MB or more (Windows 95) 8 MB or more (Windows 3.1) Macintosh : Macintosh series with 68030 or faster CPU OS: System 7 or later Memory: 8 MB or more

Continue to reverse page.

Weight and dimensions shown are approximate. Specifications are subject to change without notice.

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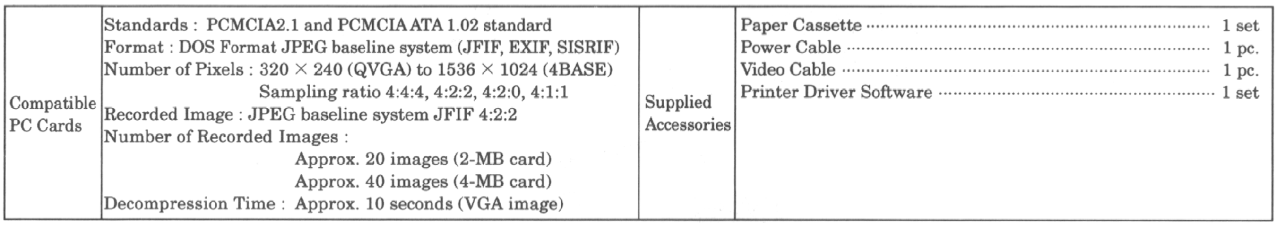
⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.



Compatible PC Cards	Standards : PCMCIA2.1 and PCMCIA ATA 1.02 standard Format : DOS Format JPEG baseline system (JFIF, EXIF, SISRIF) Number of Pixels : 320 × 240 (QVGA) to 1536 × 1024 (4BASE) Sampling ratio 4:4:4, 4:2:2, 4:2:0, 4:1:1 Recorded Image : JPEG baseline system JFIF 4:2:2 Number of Recorded Images : Approx. 20 images (2-MB card) Approx. 40 images (4-MB card) Decompression Time : Approx. 10 seconds (VGA image)	Supplied Accessories	Paper Cassette ········ 1 set Power Cable ········ 1 pc. Video Cable ········ 1 pc. Printer Driver Software ········ 1 set

1. GENERAL DESCRIPTON

1.1. OPERATING INSTRUCTIONS

2. SERVICE INFORMATION & ADJUSTMENT PROCEDURES

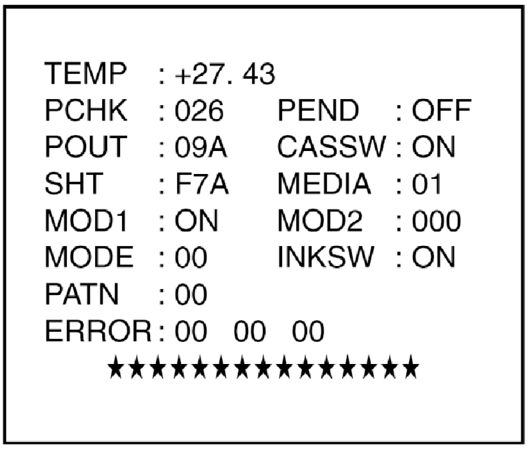
2.1. SERVICE INFORMATION

2.1.1. Test Mode

This unit has an automatic self-test mode to check the printing condition and system operation. To turn the unit into the test mode, following operations are required.

1. **Turn the power switch on.**
2. **Then, press the [TITLE] button while pressing the [↑], [←] and [MENU] buttons simultaneousely.(Except printing mode.)**
3. **Select the desired test pattern No. (PATN: **) by the [↑] or [↓] button. (Refer to the test mode and test pattern list as shown in Fig. 3.)**
4. **Then, press the PRINT button to print the test pattern or to check the system operation.To select other test pattern, press the [↑] or [↓] button again.**

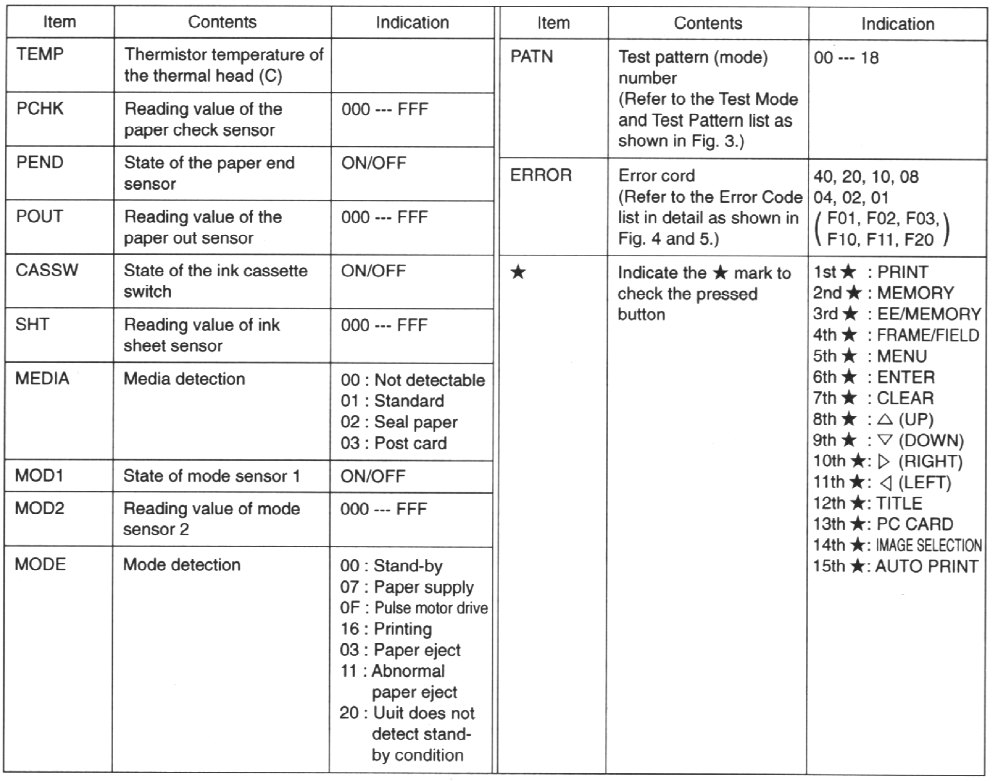
Test Mode menu is shown below.



```
TEMP   : +27. 43
PCHK   : 026     PEND   : OFF
POUT   : 09A     CASSW : ON
SHT    : F7A     MEDIA  : 01
MOD1   : ON      MOD2   : 000
MODE   : 00      INKSW  : ON
PATN   : 00
ERROR : 00   00   00
     ★★★★★★★★★★★★★★★
```

Fig. 1

The meaning of abbreviation of the Test Mode menu is as follows.



Item	Contents	Indication
TEMP	Thermistor temperature of the thermal head (C)	
PCHK	Reading value of the paper check sensor	000 --- FFF
PEND	State of the paper end sensor	ON/OFF
POUT	Reading value of the paper out sensor	000 --- FFF
CASSW	State of the ink cassette switch	ON/OFF
SHT	Reading value of ink sheet sensor	000 --- FFF
MEDIA	Media detection	00 : Not detectable 01 : Standard 02 : Seal paper 03 : Post card
MOD1	State of mode sensor 1	ON/OFF
MOD2	Reading value of mode sensor 2	000 --- FFF
MODE	Mode detection	00 : Stand-by 07 : Paper supply 0F : Pulse motor drive 16 : Printing 03 : Paper eject 11 : Abnormal paper eject 20 : Uuit does not detect stand-by condition

Item	Contents	Indication
PATN	Test pattern (mode) number (Refer to the Test Mode and Test Pattern list as shown in Fig. 3.)	00 --- 18
ERROR	Error cord (Refer to the Error Code list in detail as shown in Fig. 4 and 5.)	40, 20, 10, 08 04, 02, 01 (F01, F02, F03, F10, F11, F20)
★	Indicate the ★ mark to check the pressed button	1st★ : PRINT 2nd★ : MEMORY 3rd★ : EE/MEMORY 4th★ : FRAME/FIELD 5th★ : MENU 6th★ : ENTER 7th★ : CLEAR 8th★ : △ (UP) 9th★ : ▽ (DOWN) 10th★: ▷ (RIGHT) 11th★: ◁ (LEFT) 12th★: TITLE 13th★: PC CARD 14th★: IMAGE SELECTION 15th★: AUTO PRINT

Fig. 2

2.1.1.1. Test Mode and Test Pattern

Fig. 3

Test Mode (PATN) No.	Contents of Test Mode and Test Pattern [Use for]	Temp. Cont.	Direct Selection button
00	Sheet g measurement pattern (Magenta)	No	Title
01	Sheet g measurement pattern (Black)	No	----
02	Sheet g measurement pattern (Single color)	No	----
03	YMCBMC pattern	Yes	----
04	RGBYMC pattern	Yes	----
05	One color pattern (Density)	Yes	----
06	One color pattern (Density)	Yes	----
07	Black pattern	Yes	----
08	Black pattern (Half density)	Yes	----
09	Magenta pattern (Half density)	Yes	MENU
10	Dot pattern	Yes	----
11	Blurred print confirmation	Yes	----
12	Frill confirmation (Up side; Black)	Yes	----
13	Frill confirmation (Down side; Black)	Yes	ENTER
14	Inline confirmation pattern	No	EE/MEN
15	FG adjustment [Service use]	----	CLEAR
16	Pulse motor drive (Print speed)	----	----
17	Mechanism Test (1,000 times) To check the Head Motor operation [Service use]	----	----
18	Paper supply/eject simulation(25 pieces) To check mechanical operation of the paper feed [Service use]	----	----

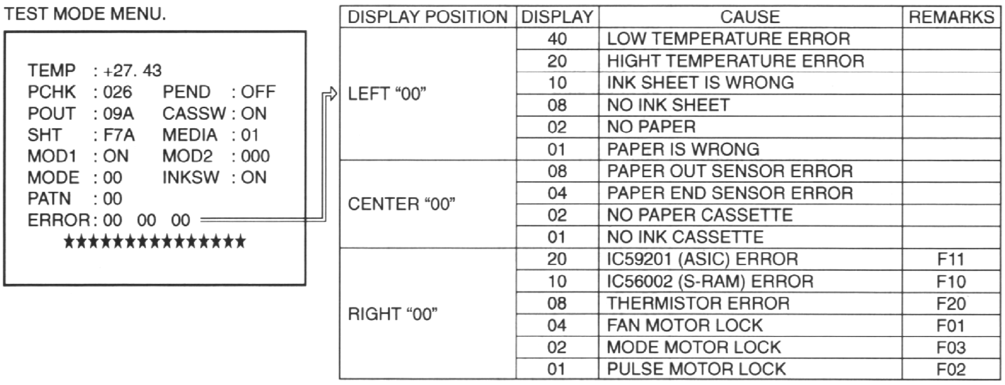
2.1.1.2. Service Information Display

The error message and the error code (F01, F02, F03, F10, F11, F20) are indicated on the monitor

screen corresponding with the trouble. The troubles indicated by the error code are shown below.

Fig. 4

DISPLAY	CAUSE	DETECT SENSOR	REMEDY / CHECK
F01	Fan Motor	Drive Current	IC6001 Pin 104 FANV (PEG) High (P590
F02	Pulse Motor	FG Sensor	IC6001 Pin 89 FG Signal (P59004-3)
F03	Mode Motor Lock	Mode Sensor	IC6001 Pin 58 MODO (P59004-2) and Pi (P59004-1), SN52001 (MODI), S52002 (M
F10	S-RAM (Read/Write) Error	IC56002	IC56002 NG
F11	ASIC (Communication to MPU) Error	IC59201	IC59201 NG
F20	Thermistor (Reading) Error	Thermistor	IC6001 Pin 87 DCMI (P59004-6) Thermis



TEST MODE MENU.

```
TEMP   : +27. 43
PCHK   : 026     PEND   : OFF
POUT   : 09A     CASSW  : ON
SHT    : F7A     MEDIA  : 01
MOD1   : ON      MOD2   : 000
MODE   : 00      INKSW  : ON
PATN   : 00
ERROR : 00   00   00
      ★★★★★★★★★★★★★★★★
```

DISPLAY POSITION	DISPLAY	CAUSE	REMARKS
LEFT “00”	40	LOW TEMPERATURE ERROR	
	20	HIGHT TEMPERATURE ERROR	
	10	INK SHEET IS WRONG	
	08	NO INK SHEET	
	02	NO PAPER	
	01	PAPER IS WRONG	
CENTER “00”	08	PAPER OUT SENSOR ERROR	
	04	PAPER END SENSOR ERROR	
	02	NO PAPER CASSETTE	
	01	NO INK CASSETTE	
RIGHT “00”	20	IC59201 (ASIC) ERROR	F11
	10	IC56002 (S-RAM) ERROR	F10
	08	THERMISTOR ERROR	F20
	04	FAN MOTOR LOCK	F01
	02	MODE MOTOR LOCK	F03
	01	PULSE MOTOR LOCK	F02

Fig. 5

Note:

When plural error occurs at the same time, a number except for the above comes out.

2.2. MECHANICAL ADJUSTMENT PROCEDURES

2.2.1. Circuit Board Layout

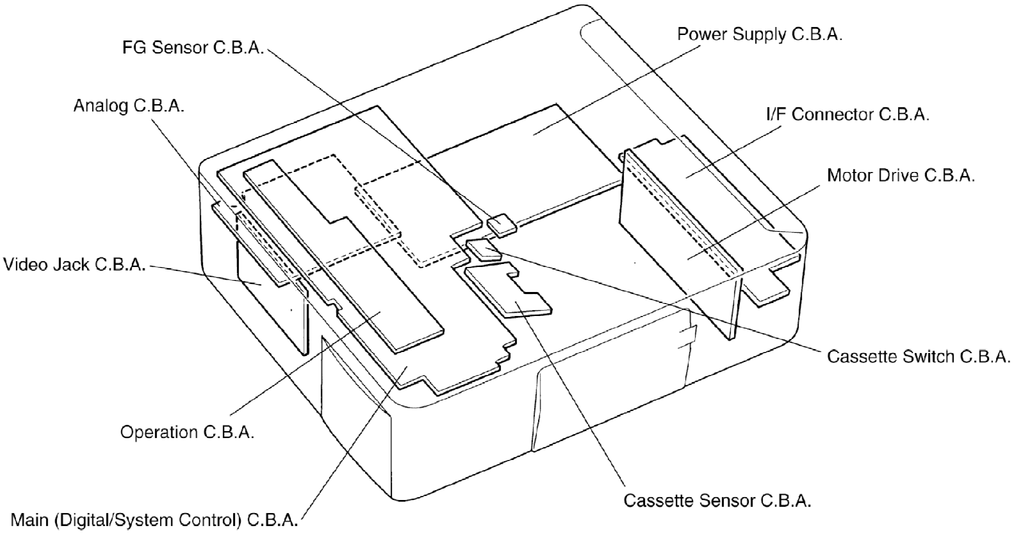

FG Sensor C.B.A.
Analog C.B.A.
Video Jack C.B.A.
Operation C.B.A.
Main (Digital/System Control) C.B.A.
Power Supply C.B.A.
I/F Connector C.B.A.
Motor Drive C.B.A.
Cassette Switch C.B.A.
Cassette Sensor C.B.A.

Fig. 1

2.2.2. Parts Location of the Sensor and Switch

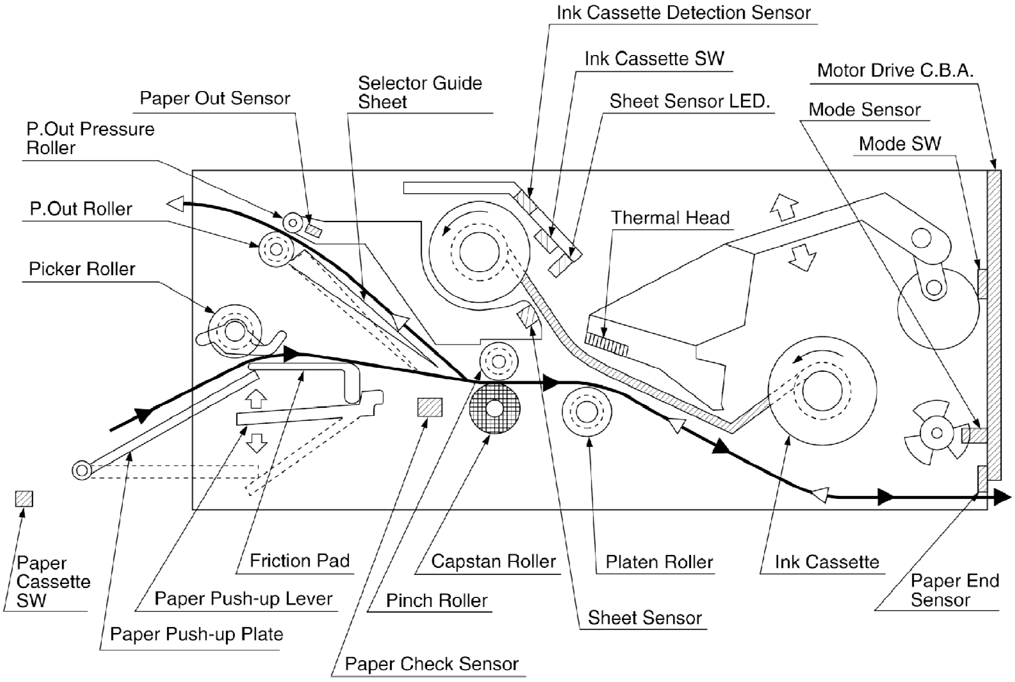

Ink Cassette Detection Sensor
Ink Cassette SW
Sheet Sensor LED.
Motor Drive C.B.A.
Mode Sensor
Mode SW
Selector Guide Sheet
Paper Out Sensor
P.Out Pressure Roller
P.Out Roller
Picker Roller
Thermal Head
Paper Cassette SW
Friction Pad
Paper Push-up Lever
Paper Push-up Plate
Capstan Roller
Pinch Roller
Paper Check Sensor
Platen Roller
Sheet Sensor
Ink Cassette
Paper End Sensor

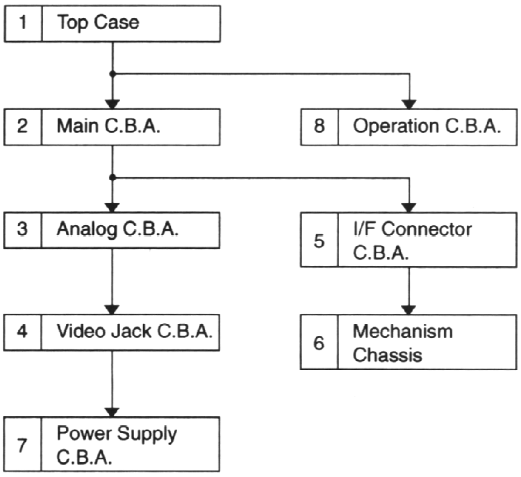
Fig. 2

2.2.3. Disassembly Method

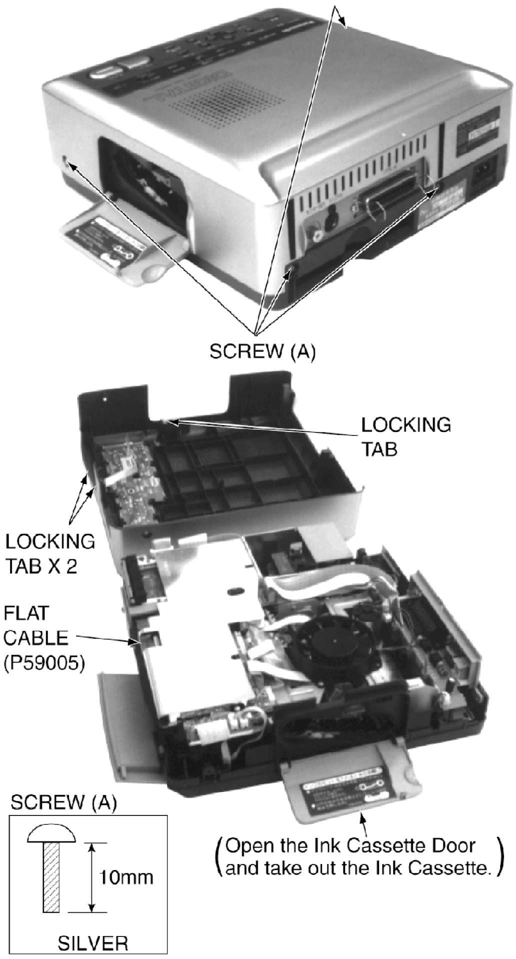
This flowchart indicates the disassembly steps of the cabinets and the circuit boards in order to replace the necessary part for servicing.

When reassembling, perform the steps in reverse order.

2.2.3.1. Disassembly Procedures for C.B.A.

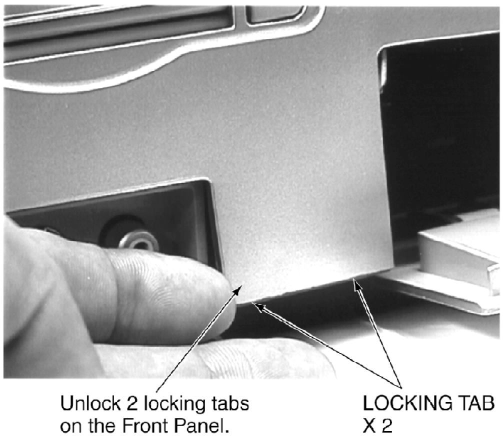

1 Top Case
2 Main C.B.A.
8 Operation C.B.A.
3 Analog C.B.A.
5 I/F Connector C.B.A.
4 Video Jack C.B.A.
6 Mechanism Chassis
7 Power Supply C.B.A.

1. Top Case


SCREW (A)
LOCKING TAB
LOCKING TAB X 2
FLAT CABLE (P59005)
SCREW (A)
10mm
SILVER

(Open the Ink Cassette Door and take out the Ink Cassette.)

Two Locking tabs on the Front Panel.


LOCKING TAB X 2

Unlock 2 locking tabs on the Front Panel.

Fig. 4

2. Main C.B.A.

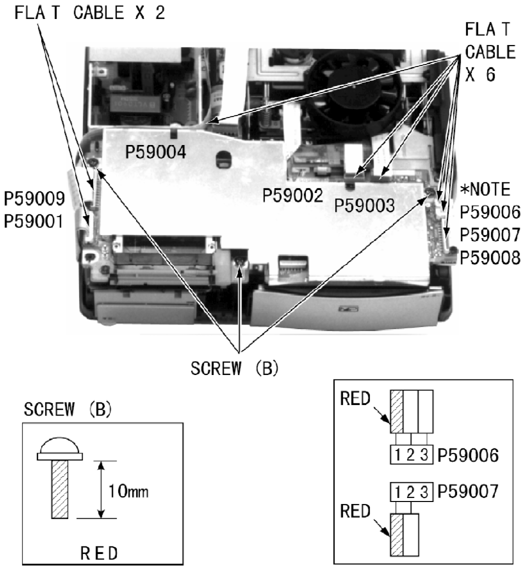

FLA T CABLE X 2
FLA T CABLE X 6
P59004
P59009
P59001
P59002
P59003
*NOTE
P59006
P59007
P59008
SCREW (B)
SCREW (B)
10mm
RED
RED
1 2 3
P59006
1 2 3
P59007
RED

Fig. 5

3. Analog C.B.A.

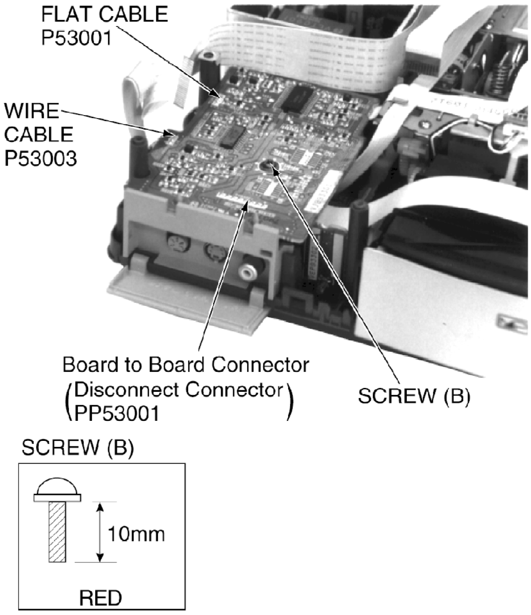

FLAT CABLE P53001
WIRE CABLE P53003
Board to Board Connector (Disconnect Connector PP53001)
SCREW (B)
SCREW (B)
10mm
RED

Fig. 6

4. Video Jack C.B.A.

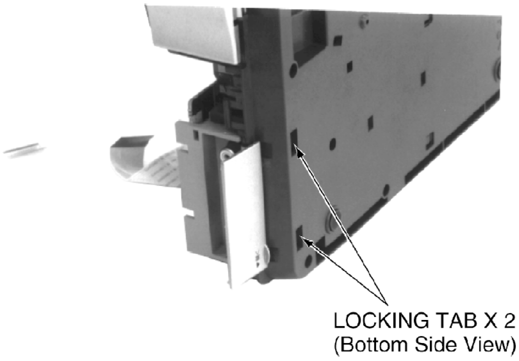

LOCKING TAB X 2
(Bottom Side View)

Fig. 7

5. I/F Connector C.B.A.

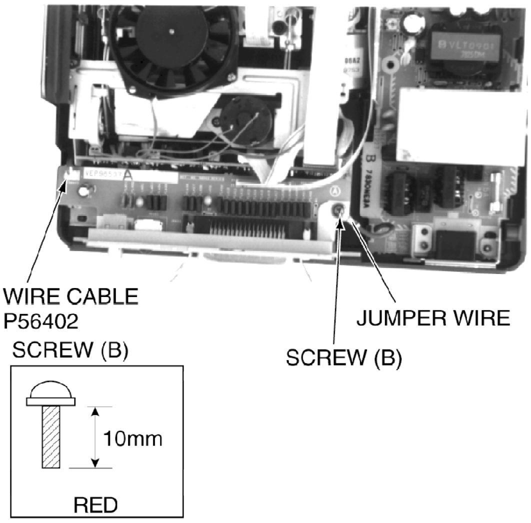

WIRE CABLE
P56402
SCREW (B)
JUMPER WIRE
SCREW (B)
10mm
RED

Fig. 8

6. Mechanism Chassis

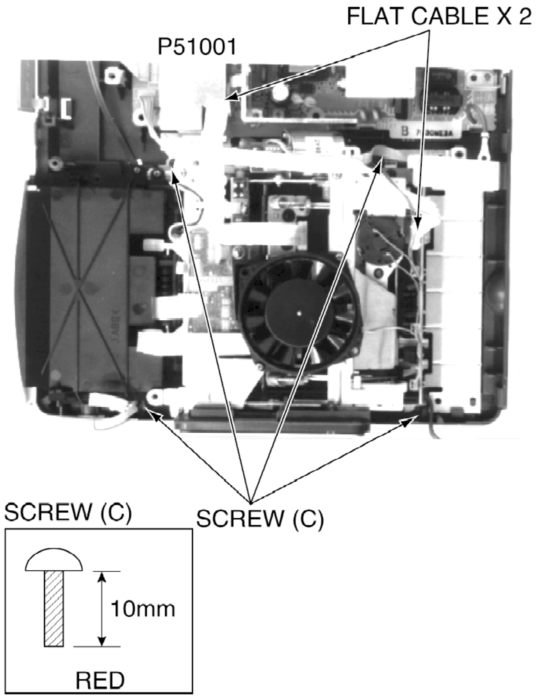

FLAT CABLE X 2
P51001
SCREW (C)
SCREW (C)
10mm
RED

Fig. 9

7. Power Supply C.B.A.

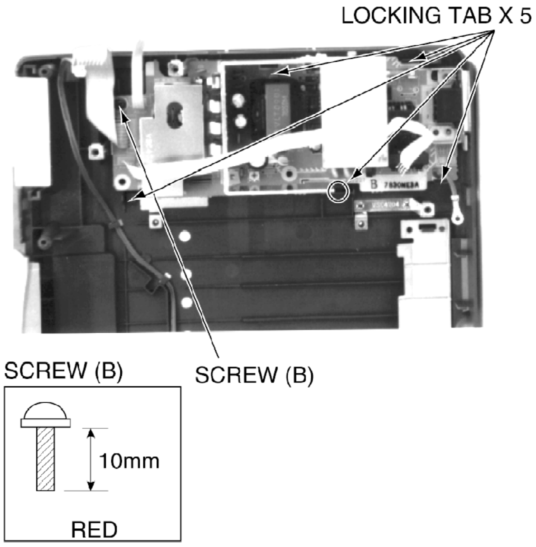
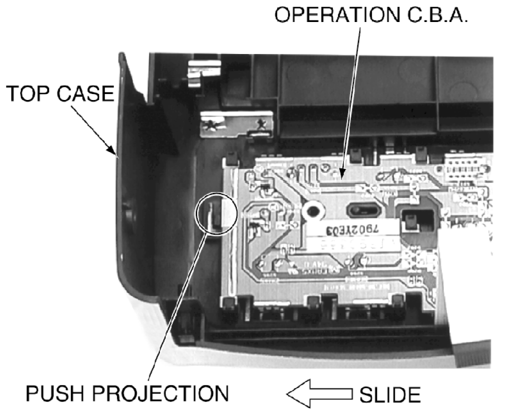

LOCKING TAB X 5
SCREW (B)
SCREW (B)
10mm
RED

Fig. 10

8. Operation C.B.A.


OPERATION C.B.A.
TOP CASE
PUSH PROJECTION
SLIDE

While pushing the projection on the Top Case, slide the Operation C.B.A.

Fig. 11

2.2.3.2. Service Position

To check and to repair the circuit board assembly, remove each circuit board and make the following condition.

2.2.3.3. Service Position

To check and to repair the circuit board assembly, remove each circuit board and make the following condition.

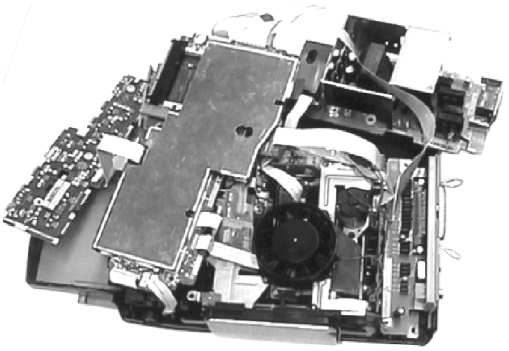


Fig. 12

2.2.3.4. Replacement Method of Main Mechanical Parts

***Remove the Mechanism Chassis from the unit (refer to Fig.9).**
When reassembling, perform the steps in reverse order.

1. Ink Cassette Panel

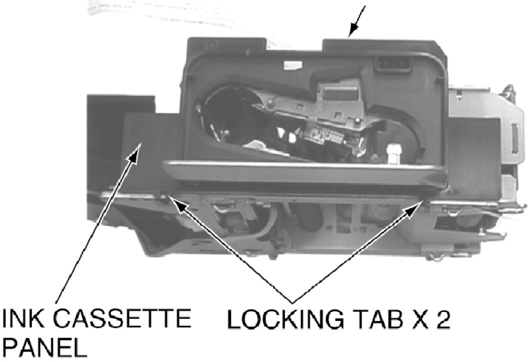

LOCKING TAB
INK CASSETTE PANEL
LOCKING TAB X 2

Fig. M1

2. Fan Motor (1)

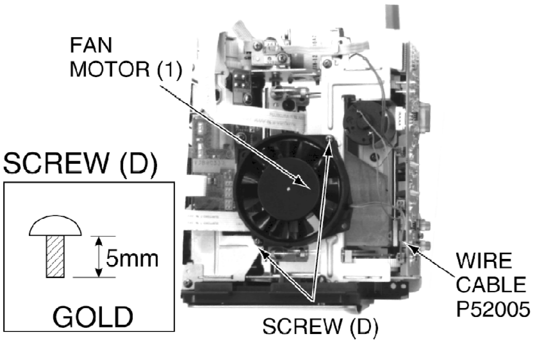

FAN
MOTOR (1)
SCREW (D)
5mm
GOLD
WIRE
CABLE
P52005
SCREW (D)

Fig. M2

3. Paper Eject Cover

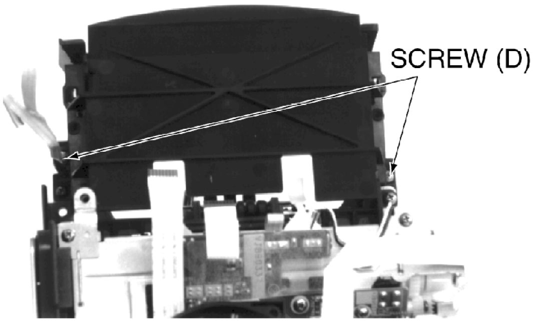


Fig. M3

4. Ink Cassette Sensor guide

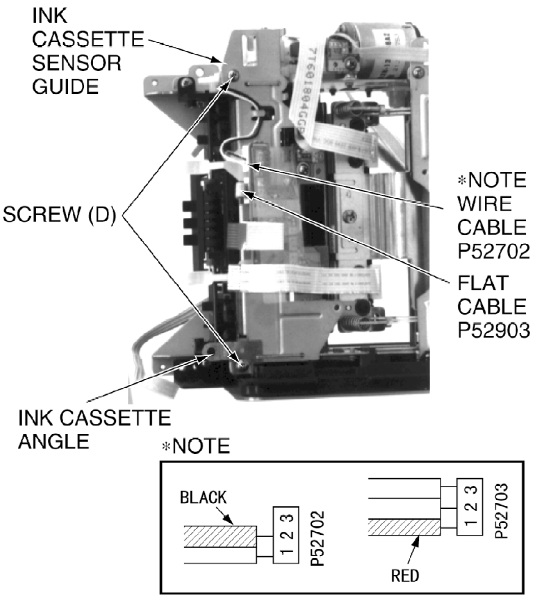

INK
CASSETTE
SENSOR
GUIDE
SCREW (D)
*NOTE
WIRE
CABLE
P52702
FLAT
CABLE
P52903
INK CASSETTE
ANGLE
*NOTE
BLACK
1 2 3
P52702
1 2 3
P52703
RED

Fig. M4

5. Take-up Unit

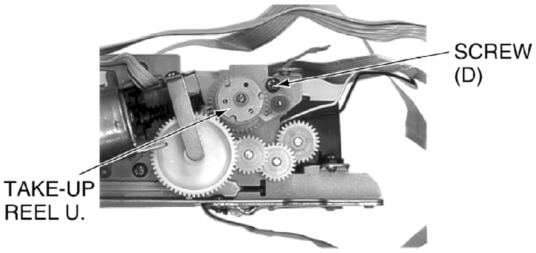
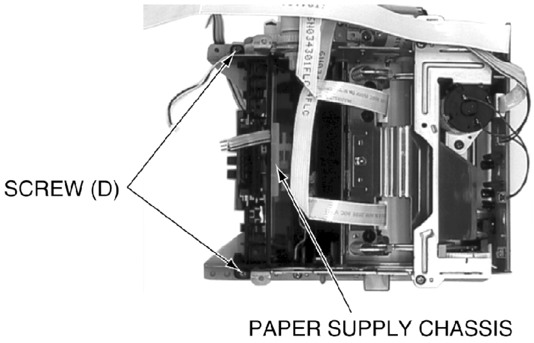
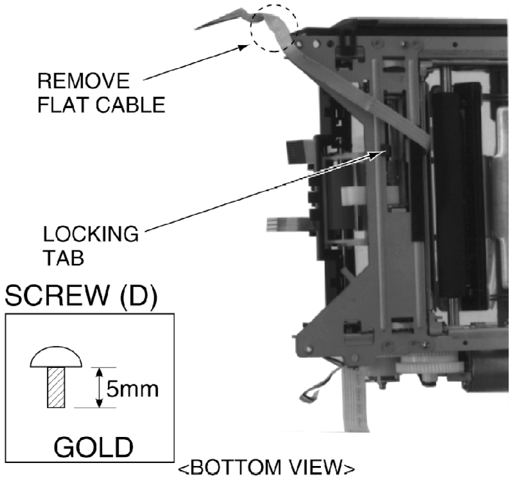

SCREW
(D)
TAKE-UP
REEL U.

Fig. M5

6. Paper Supply Cassette unit


SCREW (D)
PAPER SUPPLY CHASSIS

<TOP VIEW>


REMOVE
FLAT CABLE
LOCKING
TAB
SCREW (D)
5mm
GOLD

<BOTTOM VIEW>

Fig. M6

First, remove the Flat Cable from the side plate.
Then, remove 2 screws (D).
When removing the Paper Supply Chassis U., take care of the damage of the Flat Cable.

7. Sheet Motor (PS Motor Angle (1) U.)

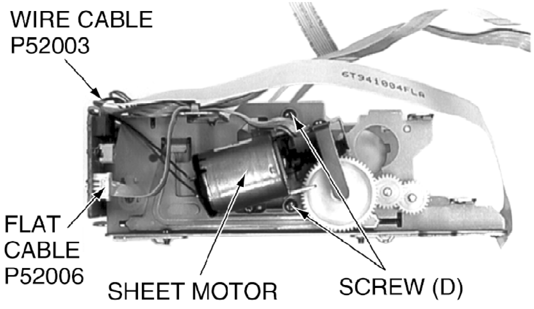

WIRE CABLE
P52003
FLAT
CABLE
P52006
SHEET MOTOR
SCREW (D)

Fig. M7

8. Fan Motor Holder

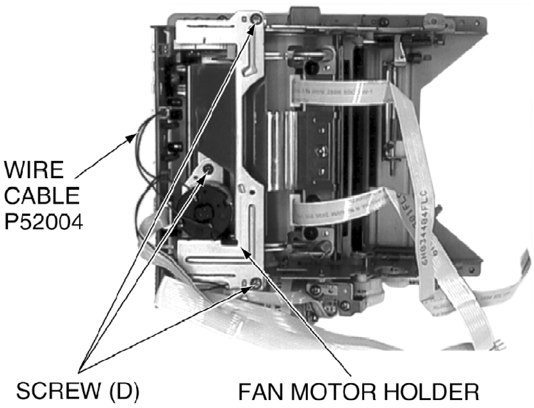

WIRE
CABLE
P52004
SCREW (D)
FAN MOTOR HOLDER

Fig. M8

9. Capstan Roller Unit / Picker Idler Gear

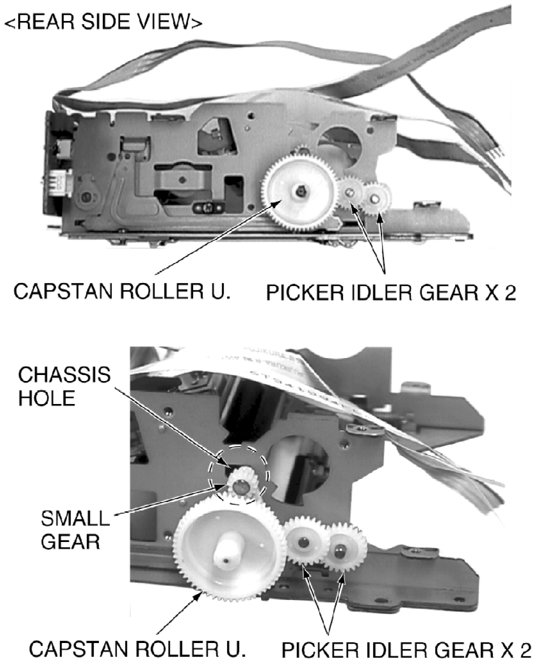

<REAR SIDE VIEW>
CAPSTAN ROLLER U.
PICKER IDLER GEAR X 2
CHASSIS
HOLE
SMALL
GEAR
CAPSTAN ROLLER U.
PICKER IDLER GEAR X 2

Fig. M9

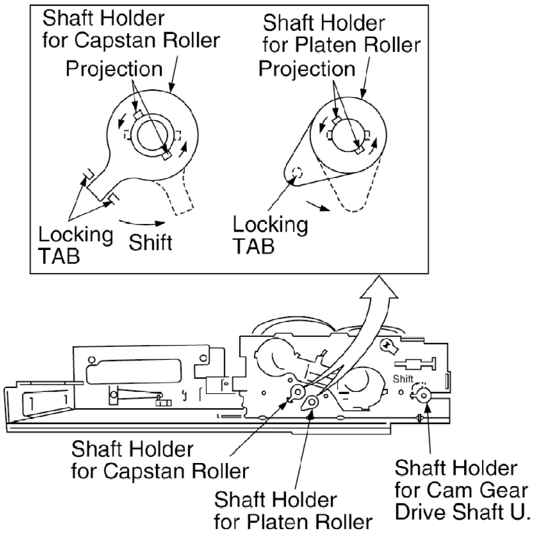

Shaft Holder
for Capstan Roller
Projection
Shaft Holder
for Platen Roller
Projection
Locking
TAB
Shift
Locking
TAB
Shift
Shaft Holder
for Capstan Roller
Shaft Holder
for Platen Roller
Shaft Holder
for Cam Gear
Drive Shaft U.

Fig. M10

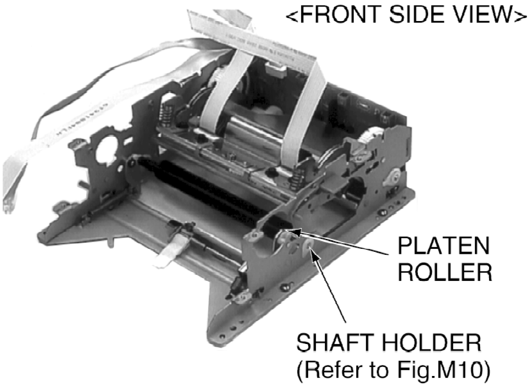
[Disassembly Procedure]

Shift the Shaft Holder so that the projection of the Shaft Holder meets the groove on the Mechanism Chassis. Then, remove the shaft holder and pull the Capstan Roller U. unit out from the rear side.

[Assembly Procedure]

After installing the Picker Idler Gears as shown in Fig. M9, install the Capstan Roller U. so that the shaft of the small gear meets the hole of the chassis.

10. Platen Roller


<FRONT SIDE VIEW>
PLATEN
ROLLER
SHAFT HOLDER
(Refer to Fig.M10)

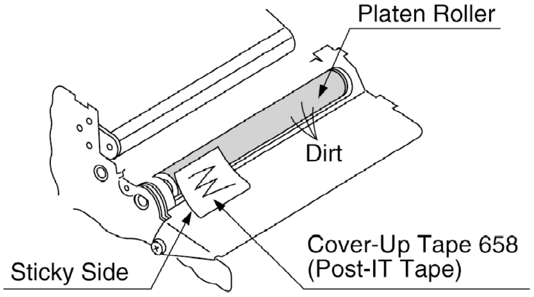

Platen Roller
Dirt
Sticky Side
Cover-Up Tape 658
(Post-IT Tape)

Fig. M11

[Disassembly Procedure]

Shift the Shaft Holder so that the projection of the Shaft Holder meets the groove on the Mechanism Chassis. Then, slightly lift up the Platen Roller and pull it out from the front side as shown in Fig. M11.

[Assembly Procedure]

Clean off the dirt with Cover-up Tape 658 (Post it TM Tape).

11. Motor Drive C.B.A.

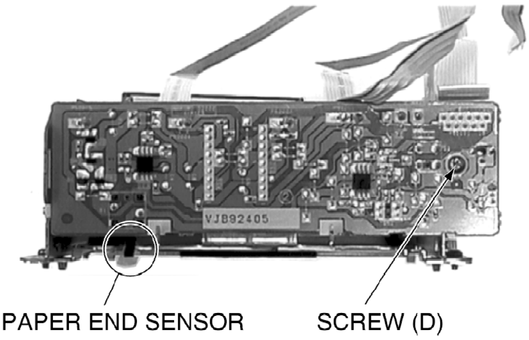


Fig. M12

Note:

Take care when removing the Motor Drive C.B.A. to prevent the Paper End Sensor damage

12. Cam Gear Drive Shaft Unit

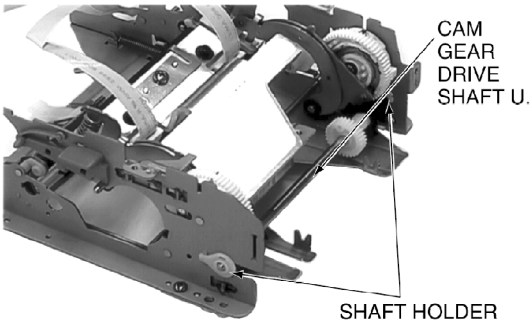


Fig. M13

[Disassembly Procedure]

Remove the Shaft Holder for Cam Gear Drive Shaft U. as shown in Fig. M13.

[Assembly Procedure]

Install the Cam Gear Drive Shaft U. so that the flat portion of the Gear is positioned upward as shown in Fig. M14.Thermal Head

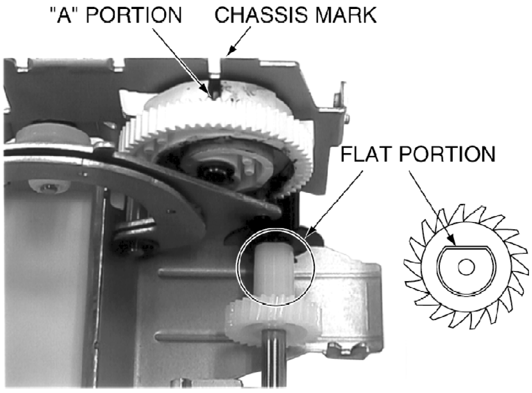

"A" PORTION
CHASSIS MARK
FLAT PORTION

Fig. M14

13. Thermal Head

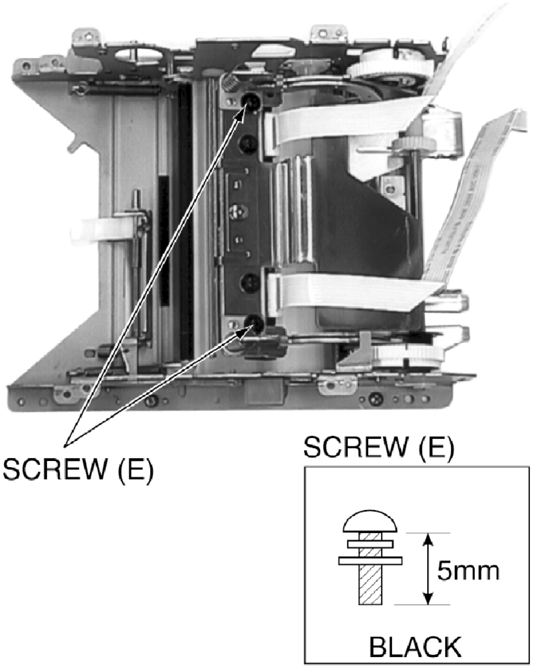

SCREW (E)
SCREW (E)
5mm
BLACK

Fig. M15

Note:

When the Thermal Head is replaced, the Thermal Head Voltage Adjustment (VTH) is required. (Refer to the Electrical Adjustment Procedures.)

[Disassembly Procedure]

Remove 2 screws (E) t remove the Thermal Head, while supporting the Thermal Head with your finger to avoid damage (drop).

[Assembly Procedure]

when installing the screw, take care of the bending of the Head Drive Arm.

If speck noise appear in the printed picture when Black pattern

(no signal input) is printed, Head Drive Arm might be bent.

Note:

Wipe off dirt on the heating element with a cloth damped with Freon and Ethyl Alcohol before running a test.

14. Pinch Roller

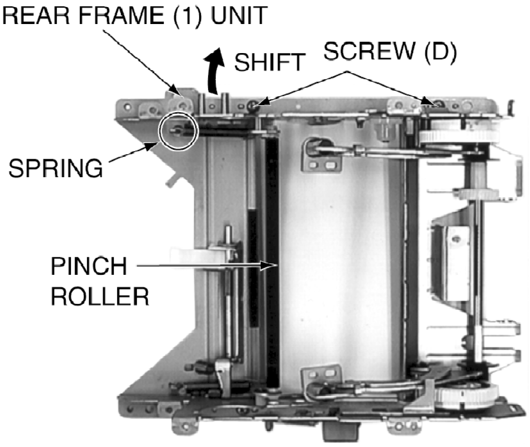

REAR FRAME (1) UNIT
SHIFT
SCREW (D)
SPRING
PINCH ROLLER

Fig. M16

[Disassembly Procedure]

Remove the Spring and 2 screws (D) and slightly shift the Rear Frame (1) unit.

15. Mode Cam Gear

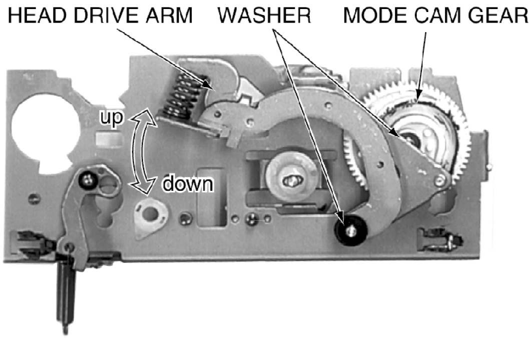

HEAD DRIVE ARM
WASHER
MODE CAM GEAR
up
down

Fig. M17

[Assembly Procedure]

Install the Cam Gear so that the "A" portion of the Mode Cam Gear meets the chassis mark as shown in Fig. M14.

Then, install the Head Drive Arm and washer so that the Head Drive Arm becomes up condition as shown in Fig. M17.

After that confirm the movement of the Head Drive Arm, Rod Arm, Pinch Roller and Push-up Lever by turning the Mode Cam Gear as shown in Fig. M18.

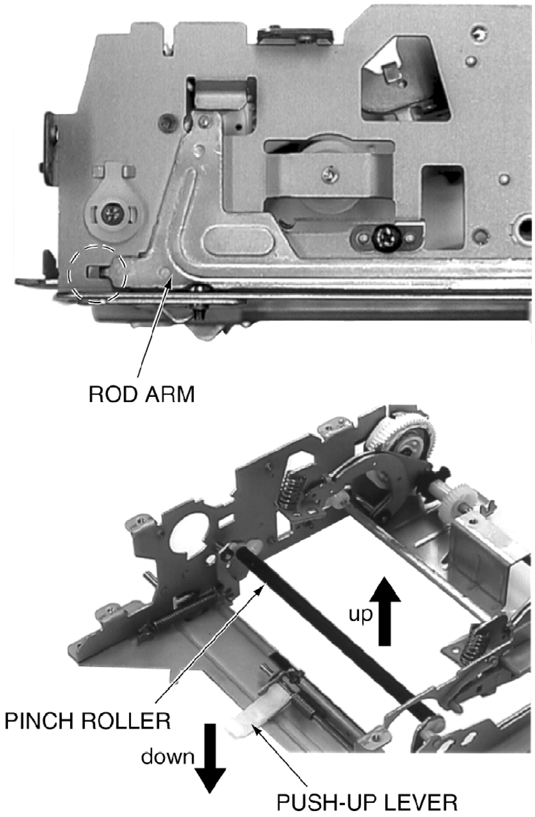


Fig. M18

2.3. ELECTRICAL ADJUSTMENT PROCEDURES

2.3.1. Test and Service Equipment

To perform the electrical adjustments, the following equipment is required.

*** VTVM (Vacuum Tube Voltmeter) or DVM (Digital Voltmeter) Voltage Range : 0.001 to 50V**
*** Dual Trace Oscilloscope voltage Range : 0.005 to 50V/div Frequency Range : DC to 20 MHz Probe : 10 : 1 or 1 : 1**
*** Frequency Counter Frequency Range : 0 to 10 MHz**
*** Color Monitor TV**
*** Color Bar Signal Generator**
*** Plastic Tip Driver and Non-Metal Driver**

2.3.2. Adjustment Procedures

1. Decoder Free Run Adjustment

INPUT	ADJ.	TP or TL
No Signal	VC53401	TL53401
TEST EQUIPMENT	SPEC.	
Frequency Counter	4.433818MHz±20Hz	

A. Don~t supply any signal to the unit during this adjustment.
B. Connect the Frequency Counter to TL53401.

C. Adjust VC53401 so that the frequency becomes 4.433818 MHz +/- 20 Hz.

2. A/D Y Level Adjustment

INPUT	ADJ.	TP or TL
Color Bar (Signal Generator)	VR53402	TL53407

TEST EQUIPMENT	SPEC.
Oscilloscope	A = 1.6 ± 0.05V

A. Supply the color bar signal to the unit and connect the monitor TV to Video Out.

B. Connect the Oscilloscope to TL53407.

C. Then, adjust VR53402 so that the "A" level becomes 1.6 V +/- 0.05V p-p.

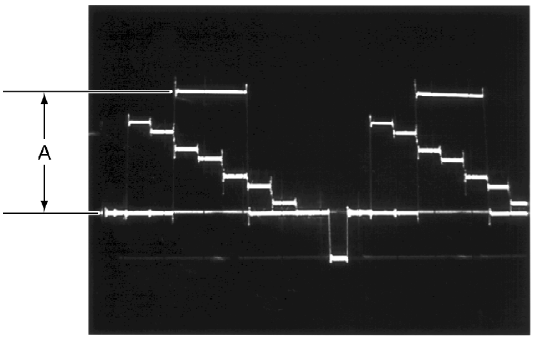


Fig. E1

3. Decoder Chrominance Phase Adjustment

TP	ADJ.	MODE	INPUT
TL53408	VR53403	E-E	PHILIPS PATTERN (COLOR BAR)

TEST EQUIPMENT	SPEC.
OSCILLOSCOPE (RANGE : 0.2V)	Fig. E2- (A) Fig. E2- (B)

Note:

To perform this adjustment completely, use Philips Test Pattern. But if you don`t have this signal, please perform this adjustment by using Colour Bar signal as shown in Fig. E2-B.

4.

Adjustment by using Philips Test Pattern

A. Supply Philips pattern signal (1Vp-p) to the unit and connect the osilloscope to TL53408.

B. Adjust VR53403 so that width (A) portion is minimized as shown in Fig. E2-A.

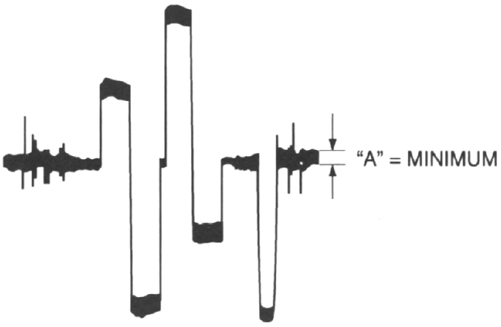
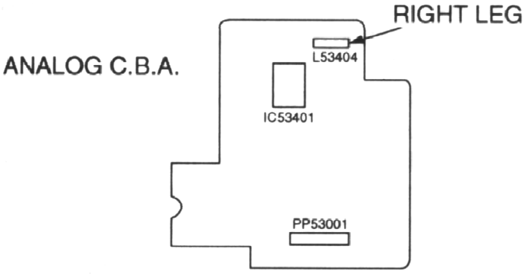


Fig. E2(A) Decoder Chroma Phase

Adjustment by using colour Bar signal

A. Supply colour Bar signal to the unit connect the osilloscope to the right of L53404


RIGHT LEG
ANALOG C.B.A.
L53404
IC53401
PP53001

B. Adjust VR53403 so that the park portion of the signal is changed linearly as shown in Fig. E2-(B)

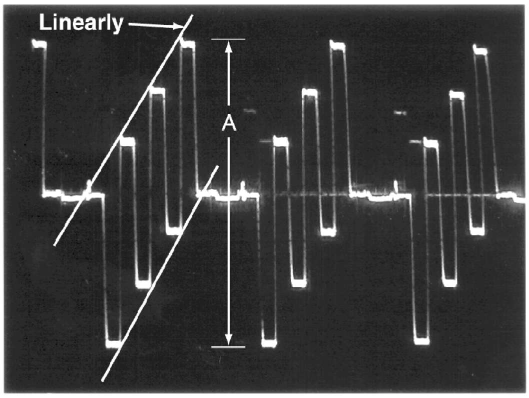


Fig. E2-(B) Decoder Chroma Phase

5. A/D Circuit B-Y signal Level Adjustment

TP	ADJ.	MODE	INPUT
TL53408	VR53401	E-E	COLOUR BAR (1Vp-p)
TEST EQIPMENT		SPEC.	
OSILLOSCOPE (RANCE : 0.2V)		1.2±0.05Vp-p	

A. Supply the colour bar signal (1Vp-p)to the unit and connect the osilloscope to TL53408.

B. Adjust VR53401 so that B-Y signal level becomes 1.2±0.05Vp-p.

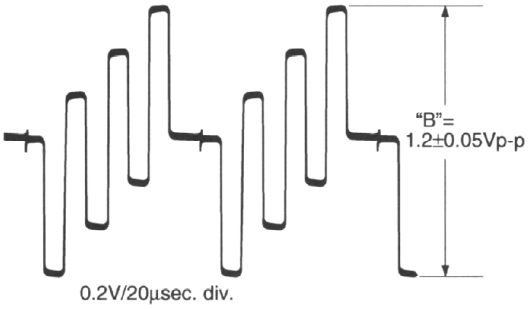


Fig. E3 B-Y Signal

6. FG Sensor Level Adjustment

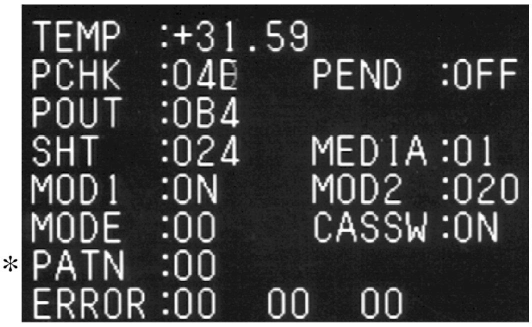
INPUT	ADJ.	TP or TL
No Signal	VR52001	TP52001/2 (GND)
TEST EQUIPMENT	SPEC.	
	A=4Vp-p	

A. Don't supply any signal to the unit during this adjustment.

B. Connect the Oscilloscope to TL52001 (HOT) and TL52002 (GND).

C. Press the "TITLE" button while pressing the "UP (↑)", "LEFT(←)" and "MENU" buttons simultaneously to make the Service Mode.

D. Set the Test Mode No. (PATN) to 15 by pressing the "UP" or "Down" button. Then, press the "Print" button to activate the PS Motor.



```
 TEMP  :+31.59
 PCHK  :04E    PEND  :OFF
 POUT  :0B4
 SHT   :024    MEDIA :01
 MOD1  :ON     MOD2  :020
 MODE  :00     CASSW :ON
*PATN  :00
 ERROR :00   00   00
```

TEST MODE

Fig. E4

E. Adjust VR52001 so that the "A" portion becomes 4V p-p during the Pulse motor is activated.

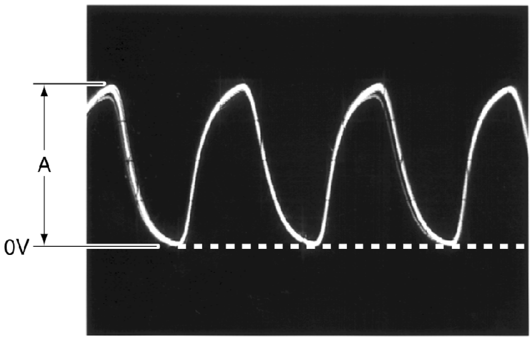


Fig. E5

F. After this adjustment, press the "CLR" button to stop the PS Motor.

7. VTH Voltage (Thermal Head Voltage) Adjustment

INPUT	ADJ.	TP or TL
No Signal	VR51001	TP59001/2 (GND)

TEST EQUIPMENT	SPEC.
Digital Voltmeter	(Indication Voltage - 0.3)± 0.1V

A. Connect the Digital voltmeter to TP59001 (HOT) and TP59002 (GND).

B. Refer to the voltage value (Specification of the adjustment) indicated on the Thermal Head as shown in Fig. E6.

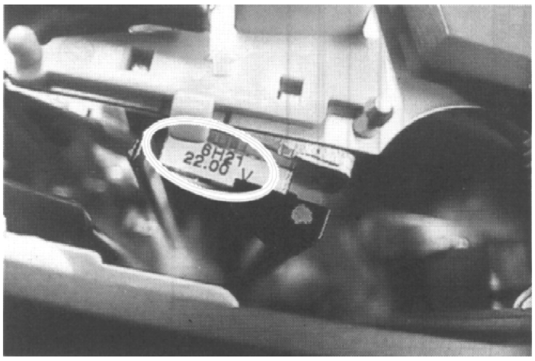


Fig. E6

C. Then, adjust VR51001 so that the voltage becomes (indicated voltage - 0.3)±0.1V.

For your reference

VR51001	Voltage Value	Printing Density
Clockwise	Down	Becomes light colour
Counterclockwise	Up	Becomes dark clolur

D. Press the "TITLE" button while pressing the "UP (↑)", "LEFT(←)" and "MENU" buttons simultaneously to make the Service Mode.

E. Then, set the Test Mode No. (PATN) to 00 by pressing the "UP" or "Down" button and print out it by pressing the "Print" button.

F. Confirm that the 11 step (from the dark side) of the magenta colour portion (Mg) is slightly coloured.

G. In case of the 12 step is coloured, reduce the voltage value little bit (within 0.5V). Then, re-print the pattern 00 and confirm that the 11 step of the magenta colour portion is slightly coloured.

H. In case of the 11 step is not coloured, increase the voltage value and confirm as above.

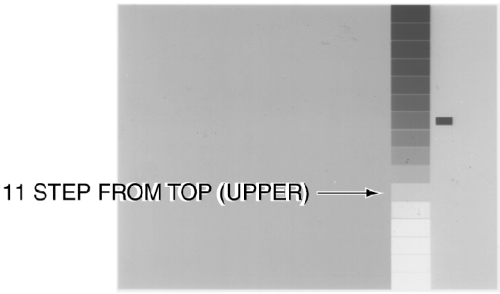
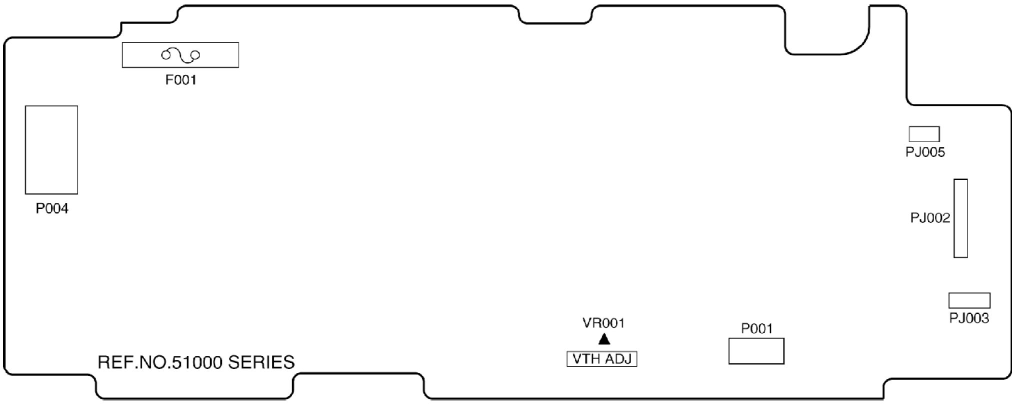
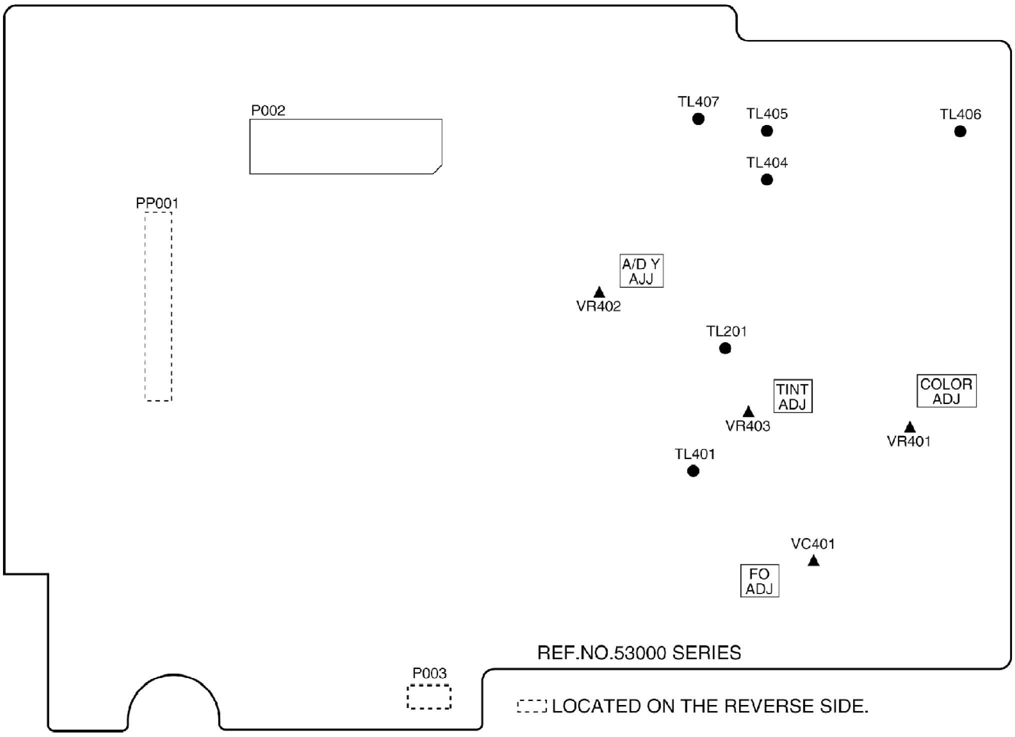


Fig. E7

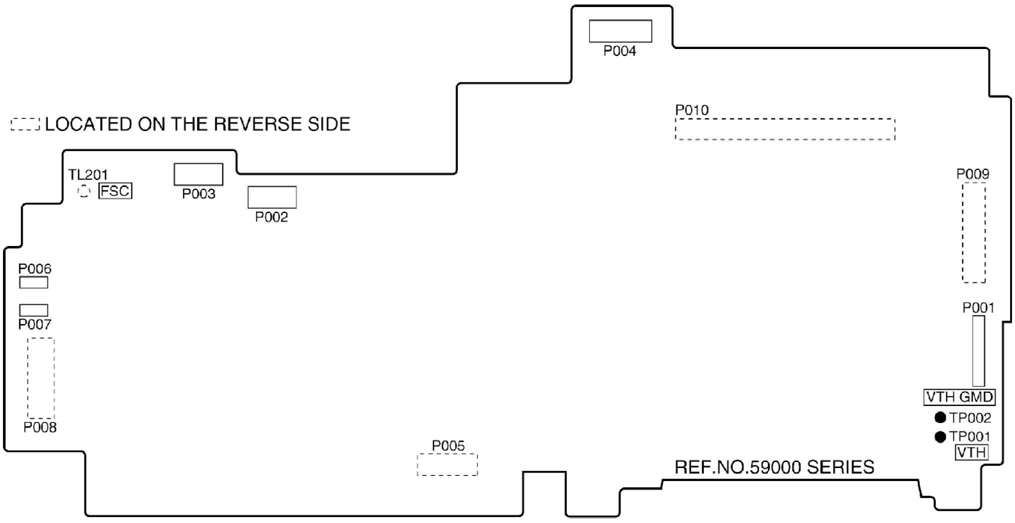
2.3.3. Location of Test Points and Controls


F001
P004
PJ005
PJ002
PJ003
VR001
VTH ADJ
P001
REF.NO.51000 SERIES

POWER SUPPLY C.B.A.


P002
TL407
TL405
TL406
TL404
PP001
A/D Y AJJ
VR402
TL201
TINT ADJ
VR403
COLOR ADJ
VR401
TL401
VC401
FO ADJ
REF.NO.53000 SERIES
P003
LOCATED ON THE REVERSE SIDE.

ALALOG C.B.A.


LOCATED ON THE REVERSE SIDE
P004
P010
TL201
FSC
P003
P002
P009
P006
P007
P001
P008
VTH GMD
TP002
TP001
VTH
P005
REF.NO.59000 SERIES

MAIN C.B.A.

3. BLOCK DIAGRAM & SCHEMATIC DIAGRAM

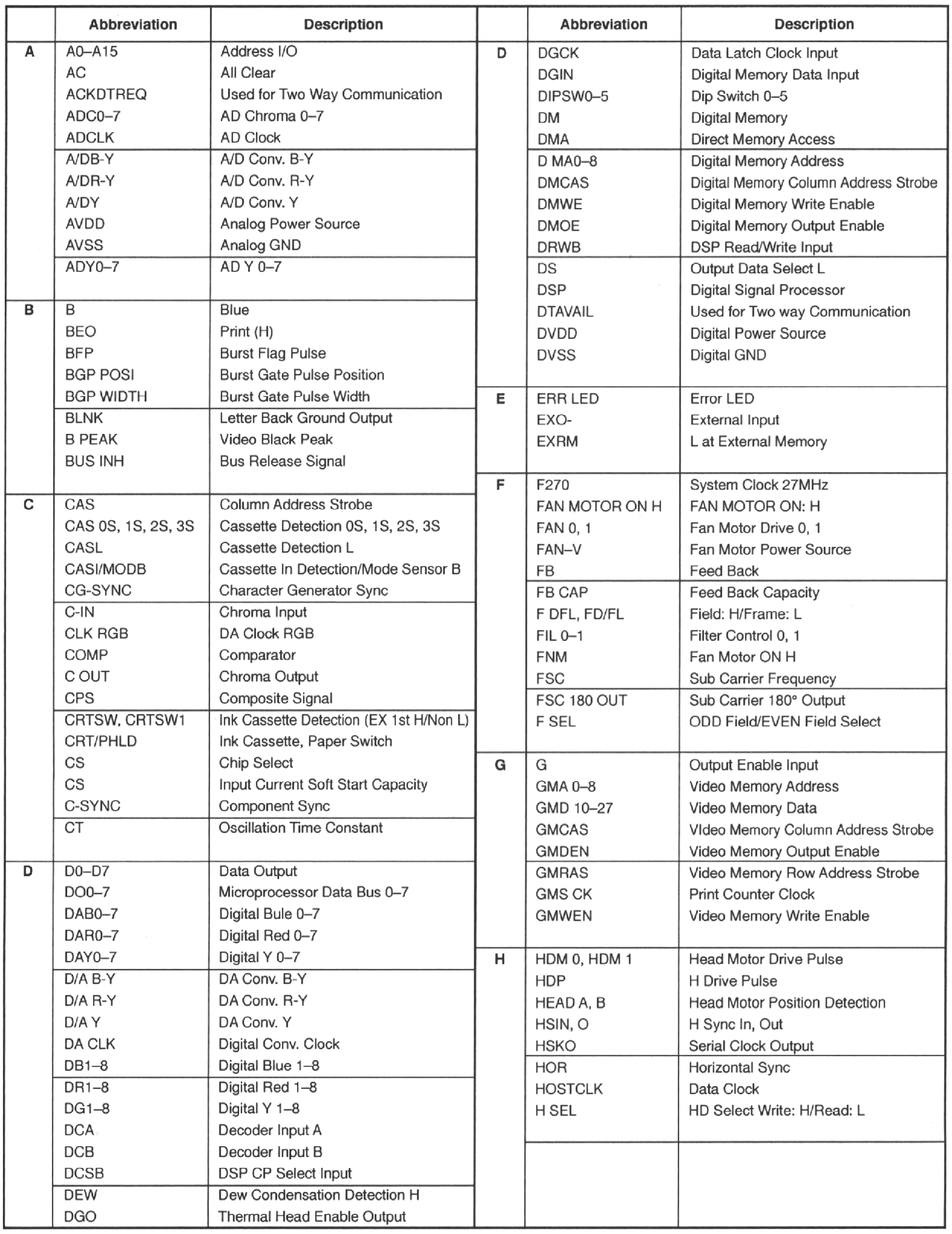
IMPORTANT SAFETY NOTICE

COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

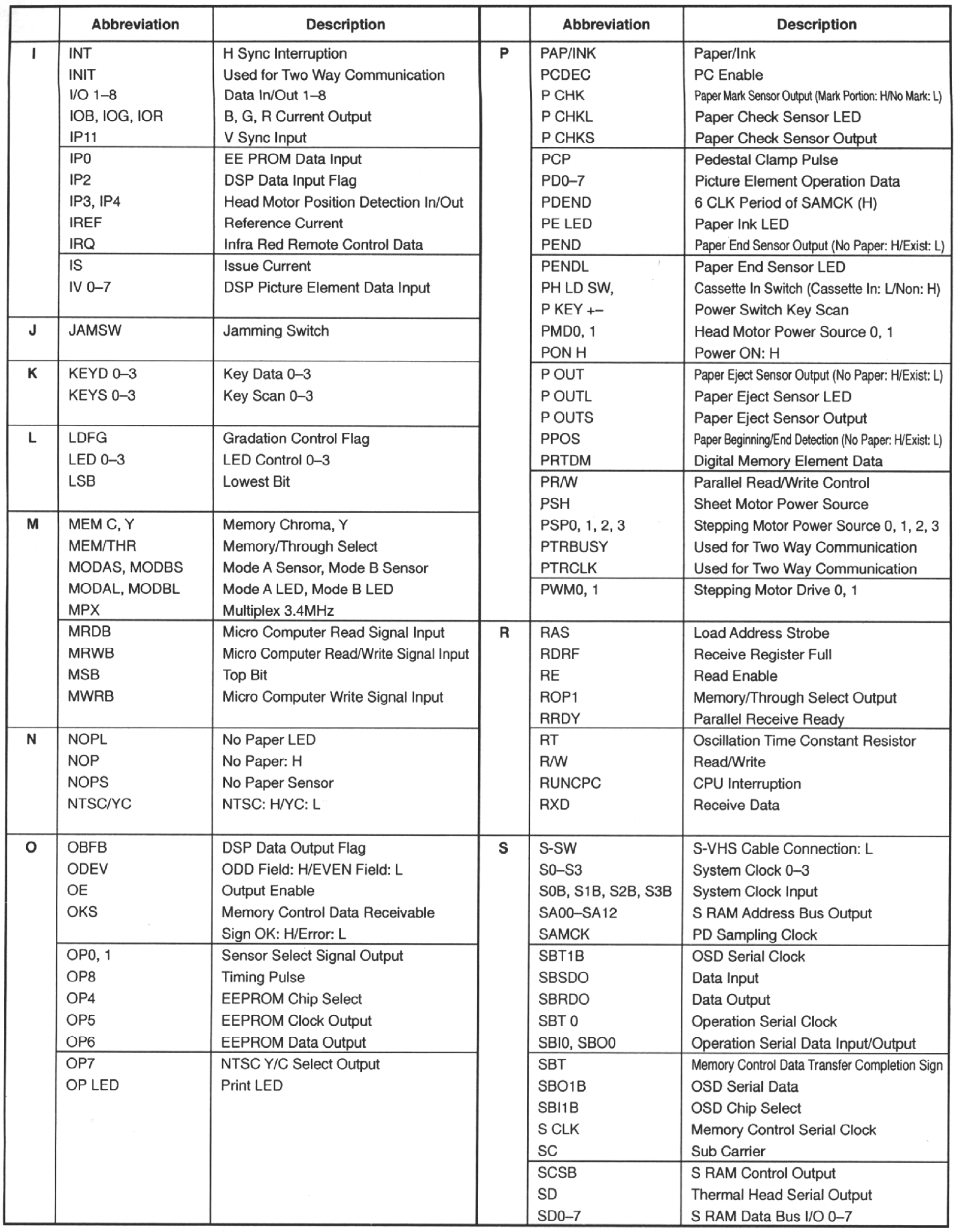
Note:

DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWNIN THE PARTS LIST
AND MAY BE SLILGHTLY DIFFERENT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

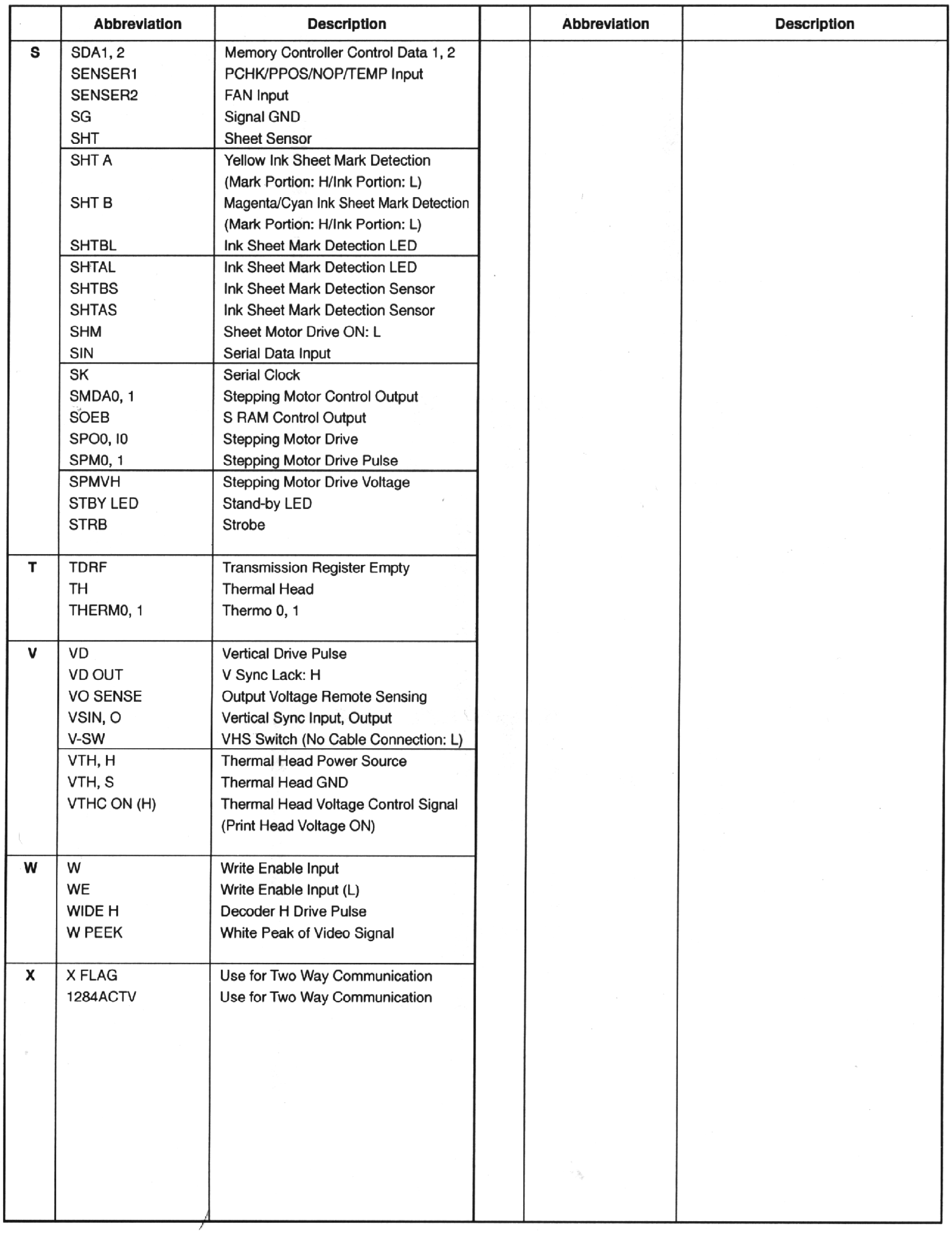
3.1. ABBREVIATIONS



	Abbreviation	Description
A	A0–A15	Address I/O
	AC	All Clear
	ACKDTREQ	Used for Two Way Communication
	ADC0–7	AD Chroma 0–7
	ADCLK	AD Clock
	A/DB-Y	A/D Conv. B-Y
	A/DR-Y	A/D Conv. R-Y
	A/DY	A/D Conv. Y
	AVDD	Analog Power Source
	AVSS	Analog GND
	ADY0–7	AD Y 0–7
B	B	Blue
	BEO	Print (H)
	BFP	Burst Flag Pulse
	BGP POSI	Burst Gate Pulse Position
	BGP WIDTH	Burst Gate Pulse Width
	BLNK	Letter Back Ground Output
	B PEAK	Video Black Peak
	BUS INH	Bus Release Signal
C	CAS	Column Address Strobe
	CAS 0S, 1S, 2S, 3S	Cassette Detection 0S, 1S, 2S, 3S
	CASL	Cassette Detection L
	CASI/MODB	Cassette In Detection/Mode Sensor B
	CG-SYNC	Character Generator Sync
	C-IN	Chroma Input
	CLK RGB	DA Clock RGB
	COMP	Comparator
	C OUT	Chroma Output
	CPS	Composite Signal
	CRTSW, CRTSW1	Ink Cassette Detection (EX 1st H/Non L)
	CRT/PHLD	Ink Cassette, Paper Switch
	CS	Chip Select
	CS	Input Current Soft Start Capacity
	C-SYNC	Component Sync
	CT	Oscillation Time Constant
D	D0–D7	Data Output
	DO0–7	Microprocessor Data Bus 0–7
	DAB0–7	Digital Bule 0–7
	DAR0–7	Digital Red 0–7
	DAY0–7	Digital Y 0–7
	D/A B-Y	DA Conv. B-Y
	D/A R-Y	DA Conv. R-Y
	D/A Y	DA Conv. Y
	DA CLK	Digital Conv. Clock
	DB1–8	Digital Blue 1–8
	DR1–8	Digital Red 1–8
	DG1–8	Digital Y 1–8
	DCA	Decoder Input A
	DCB	Decoder Input B
	DCSB	DSP CP Select Input
	DEW	Dew Condensation Detection H
	DGO	Thermal Head Enable Output
D	DGCK	Data Latch Clock Input
	DGIN	Digital Memory Data Input
	DIPSW0–5	Dip Switch 0–5
	DM	Digital Memory
	DMA	Direct Memory Access
	D MA0–8	Digital Memory Address
	DMCAS	Digital Memory Column Address Strobe
	DMWE	Digital Memory Write Enable
	DMOE	Digital Memory Output Enable
	DRWB	DSP Read/Write Input
	DS	Output Data Select L
	DSP	Digital Signal Processor
	DTAVAIL	Used for Two way Communication
	DVDD	Digital Power Source
	DVSS	Digital GND
E	ERR LED	Error LED
	EXO-	External Input
	EXRM	L at External Memory
F	F270	System Clock 27MHz
	FAN MOTOR ON H	FAN MOTOR ON: H
	FAN 0, 1	Fan Motor Drive 0, 1
	FAN–V	Fan Motor Power Source
	FB	Feed Back
	FB CAP	Feed Back Capacity
	F DFL, FD/FL	Field: H/Frame: L
	FIL 0–1	Filter Control 0, 1
	FNM	Fan Motor ON H
	FSC	Sub Carrier Frequency
	FSC 180 OUT	Sub Carrier 180° Output
	F SEL	ODD Field/EVEN Field Select
G	G	Output Enable Input
	GMA 0–8	Video Memory Address
	GMD 10–27	Video Memory Data
	GMCAS	VIdeo Memory Column Address Strobe
	GMDEN	Video Memory Output Enable
	GMRAS	Video Memory Row Address Strobe
	GMS CK	Print Counter Clock
	GMWEN	Video Memory Write Enable
H	HDM 0, HDM 1	Head Motor Drive Pulse
	HDP	H Drive Pulse
	HEAD A, B	Head Motor Position Detection
	HSIN, O	H Sync In, Out
	HSKO	Serial Clock Output
	HOR	Horizontal Sync
	HOSTCLK	Data Clock
	H SEL	HD Select Write: H/Read: L



	Abbreviation	Description
I	INT	H Sync Interruption
	INIT	Used for Two Way Communication
	I/O 1–8	Data In/Out 1–8
	IOB, IOG, IOR	B, G, R Current Output
	IP11	V Sync Input
	IP0	EE PROM Data Input
	IP2	DSP Data Input Flag
	IP3, IP4	Head Motor Position Detection In/Out
	IREF	Reference Current
	IRQ	Infra Red Remote Control Data
	IS	Issue Current
	IV 0–7	DSP Picture Element Data Input
J	JAMSW	Jamming Switch
K	KEYD 0–3	Key Data 0–3
	KEYS 0–3	Key Scan 0–3
L	LDFG	Gradation Control Flag
	LED 0–3	LED Control 0–3
	LSB	Lowest Bit
M	MEM C, Y	Memory Chroma, Y
	MEM/THR	Memory/Through Select
	MODAS, MODBS	Mode A Sensor, Mode B Sensor
	MODAL, MODBL	Mode A LED, Mode B LED
	MPX	Multiplex 3.4MHz
	MRDB	Micro Computer Read Signal Input
	MRWB	Micro Computer Read/Write Signal Input
	MSB	Top Bit
	MWRB	Micro Computer Write Signal Input
N	NOPL	No Paper LED
	NOP	No Paper: H
	NOPS	No Paper Sensor
	NTSC/YC	NTSC: H/YC: L
O	OBFB	DSP Data Output Flag
	ODEV	ODD Field: H/EVEN Field: L
	OE	Output Enable
	OKS	Memory Control Data Receivable Sign OK: H/Error: L
	OP0, 1	Sensor Select Signal Output
	OP8	Timing Pulse
	OP4	EEPROM Chip Select
	OP5	EEPROM Clock Output
	OP6	EEPROM Data Output
	OP7	NTSC Y/C Select Output
	OP LED	Print LED
P	PAP/INK	Paper/Ink
	PCDEC	PC Enable
	P CHK	Paper Mark Sensor Output (Mark Portion: H/No Mark: L)
	P CHKL	Paper Check Sensor LED
	P CHKS	Paper Check Sensor Output
	PCP	Pedestal Clamp Pulse
	PD0–7	Picture Element Operation Data
	PDEND	6 CLK Period of SAMCK (H)
	PE LED	Paper Ink LED
	PEND	Paper End Sensor Output (No Paper: H/Exist: L)
	PENDL	Paper End Sensor LED
	PH LD SW,	Cassette In Switch (Cassette In: L/Non: H)
	P KEY +–	Power Switch Key Scan
	PMD0, 1	Head Motor Power Source 0, 1
	PON H	Power ON: H
	P OUT	Paper Eject Sensor Output (No Paper: H/Exist: L)
	P OUTL	Paper Eject Sensor LED
	P OUTS	Paper Eject Sensor Output
	PPOS	Paper Beginning/End Detection (No Paper: H/Exist: L)
	PRTDM	Digital Memory Element Data
	PR/W	Parallel Read/Write Control
	PSH	Sheet Motor Power Source
	PSP0, 1, 2, 3	Stepping Motor Power Source 0, 1, 2, 3
	PTRBUSY	Used for Two Way Communication
	PTRCLK	Used for Two Way Communication
	PWM0, 1	Stepping Motor Drive 0, 1
R	RAS	Load Address Strobe
	RDRF	Receive Register Full
	RE	Read Enable
	ROP1	Memory/Through Select Output
	RRDY	Parallel Receive Ready
	RT	Oscillation Time Constant Resistor
	R/W	Read/Write
	RUNCPC	CPU Interruption
	RXD	Receive Data
S	S-SW	S-VHS Cable Connection: L
	S0–S3	System Clock 0–3
	S0B, S1B, S2B, S3B	System Clock Input
	SA00–SA12	S RAM Address Bus Output
	SAMCK	PD Sampling Clock
	SBT1B	OSD Serial Clock
	SBSDO	Data Input
	SBRDO	Data Output
	SBT 0	Operation Serial Clock
	SBI0, SBO0	Operation Serial Data Input/Output
	SBT	Memory Control Data Transfer Completion Sign
	SBO1B	OSD Serial Data
	SBI1B	OSD Chip Select
	S CLK	Memory Control Serial Clock
	SC	Sub Carrier
	SCSB	S RAM Control Output
	SD	Thermal Head Serial Output
	SD0–7	S RAM Data Bus I/O 0–7



	Abbreviation	Description		Abbreviation	Description
S	SDA1, 2	Memory Controller Control Data 1, 2			
	SENSER1	PCHK/PPOS/NOP/TEMP Input			
	SENSER2	FAN Input			
	SG	Signal GND			
	SHT	Sheet Sensor			
	SHT A	Yellow Ink Sheet Mark Detection (Mark Portion: H/Ink Portion: L)			
	SHT B	Magenta/Cyan Ink Sheet Mark Detection (Mark Portion: H/Ink Portion: L)			
	SHTBL	Ink Sheet Mark Detection LED			
	SHTAL	Ink Sheet Mark Detection LED			
	SHTBS	Ink Sheet Mark Detection Sensor			
	SHTAS	Ink Sheet Mark Detection Sensor			
	SHM	Sheet Motor Drive ON: L			
	SIN	Serial Data Input			
	SK	Serial Clock			
	SMDA0, 1	Stepping Motor Control Output			
	SOEB	S RAM Control Output			
	SPO0, I0	Stepping Motor Drive			
	SPM0, 1	Stepping Motor Drive Pulse			
	SPMVH	Stepping Motor Drive Voltage			
	STBY LED	Stand-by LED			
	STRB	Strobe			
T	TDRF	Transmission Register Empty			
	TH	Thermal Head			
	THERM0, 1	Thermo 0, 1			
V	VD	Vertical Drive Pulse			
	VD OUT	V Sync Lack: H			
	VO SENSE	Output Voltage Remote Sensing			
	VSIN, O	Vertical Sync Input, Output			
	V-SW	VHS Switch (No Cable Connection: L)			
	VTH, H	Thermal Head Power Source			
	VTH, S	Thermal Head GND			
	VTHC ON (H)	Thermal Head Voltage Control Signal (Print Head Voltage ON)			
W	W	Write Enable Input			
	WE	Write Enable Input (L)			
	WIDE H	Decoder H Drive Pulse			
	W PEEK	White Peak of Video Signal			
X	X FLAG	Use for Two Way Communication			
	1284ACTV	Use for Two Way Communication			

3.2. BLOCK DIAGRAM

3.3. SCHEMATIC DIAGRAM

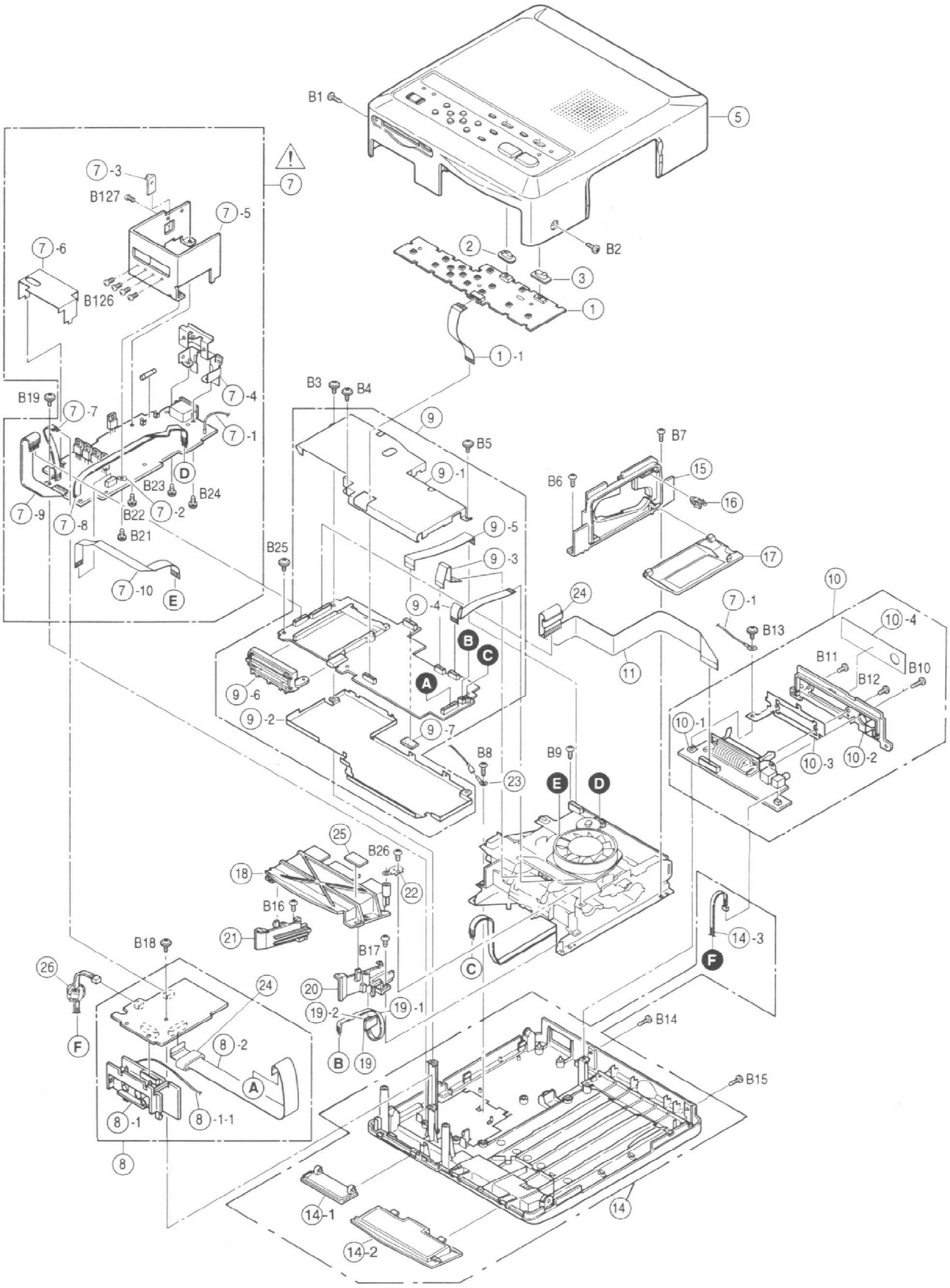
3.4. CIRCUIT BOARD A`SSAY

4. EXPLODED VIEWS & REPLACEMENT PARTS LIST

4.1. Chassis Frame & Casing Parts Section Exploded View

IMPORTANT SAFETY NOTICE

Components identified with the ⚠ have the special characteristics for safety.
When replacing any of components, use only the same type.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4.2. Chassis Frame & Casing Parts Section Replacement Part List

Note:

1. ***Be sure to make your orders of replacement parts according to this list.**

2. **IMPORTANT SAFETY NOTICE**

Components identified with the mark ⚠ have the special characteristics for safety. When replacing any of these components, use only the same type.

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
1 (1)	VEP90366A	OPERATION C.B.A.	1	(RTL)
1-1 (1)	VWJ1249	FLAT CABLE	1	P56201 - P59005
2 (1)	VGU7676	SLIDE BUTTON	1	
3 (1)	VGU7677	RETURN BUTTON	1	
5 (1)	VYK8444	TOP CASE (1)	1	NV-MPD1E/B/EN
5 (1)	VYK8447	TOP CASE (1)	1	NV-MPD1MU
7 (1) ⚠	VEP91234A	POWER SUPPLY C.B.A.	1	(RTL)
7-1 (1)	VEE0C57	WIRE CABLE	1	
7-2 (1)	VMA6768	EARTH ANGLE	1	
7-3 (1)	VMP4446	TR. SUPPORT SPRING	1	Q51001
7-4 (1)	VMP5567	AC INLET ANGLE	1	
7-5 (1)	VSC4791	HEAT SINK	1	
7-6 (1)	VSC4737	SHIELD CASE	1	
7-7 (1)	VWJ03F1080QV	3-PIN FLAT CABLE	1	PJ51005 - P53001
7-8 (1)	VWJ04D5250QV	4-PIN FLAT CABLE	1	PJ51003 - P52001
7-9 (1)	VWJ08F1140QV	8-PIN FLAT CABLE	1	PJ51002 - P59001
7-10 (1)	VWJ1245	HEAD POWER CABLE	1	P51001 - THERMAL HEAD
8 (1)	VEP93312A	ANALOG C.B.A.	1	(RTL)
8-1 (1)	VEP93302F	VIDEO JACK C.B.A.	1	(RTL)
8-1-1(1)	VEE0C80	EARTH CABLE	1	
8-2 (1)	VWJ20XW215BB	20-PIN FLAT CABLE	1	P53002 - P59008
9 (1)	VEP96532A	MAIN C.B.A.	1	(RTL)
9-1 (1)	VSC4711	SHIELD CASE (TOP)	1	
9-2 (1)	VSC4712	SHIELD CASE (BOTTOM)	1	
9-3 (1)	VWJ08HW060BB	8-PIN FLAT CABLE	1	P59002 - P52701
9-4 (1)	VWJ08HW110BB	8-PIN FLAT CABLE	1	P59003 - THERMAL HEAD
9-5 (1)	VWJ11HW125BB	11-PIN FLAT CABLE	1	P59004 - P52002
9-6 (1)	VXQ0702	BLIND HOLDER U.	1	
9-7 (1)	VMT0076	SPONGE CUSHION	1	
10 (1)	VEP96507A	I/F CONNECTOR C.B.A.	1	(RTL) NV-MPD1E/B/EN
10 (1)	VEP96507C	I/F CONNECTOR C.B.A.	1	(RTL) NV-MPD1MU
10-1 (1)	VMA6768	EARTH ANGLE	1	EXCEPT NV-MPD1MU
10-2 (1)	VJH1015	REAR JACK PLATE	1	NV-MPD1E/B/EN
10-2 (1)	VJH1027	REAR JACK PLATE	1	NV-MPD1MU
10-3 (1)	VMP5565	INTERFACE ANGLE	1	
10-4 (1)	VGH4176	JACK PLATE COVER	1	NV-MPD1MU ONLY
11 (1)	VWJ1228	I/F CABLE	1	P59009 - P56401

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
				EXCEPT NV-MPD1MU
14 (1)	VYK8539	BOTTOM CASE U.	1	NV-MPD1E/B/EN
14 (1)	VYK8438	BOTTOM CASE U.	1	NV-MPD1MU
14-1 (1)	VKF2916	JACK DOOR	1	
14-2 (1)	VYF2486	CASSETTE DOOR (1)	1	
14-3 (1)	VEE0E20-N	VIDEO SHIELD CABLE	1	PP53003 - P56402
				NV-MPD1E/B/EN
14-3 (1)	VEE0C41-N	VIDEO SHIELD CABLE	1	PP53003 - P56402
				NV-MPD1MU
15 (1)	VGP4432	INK CASSETTE PANEL	1	
16 (1)	VGQ0550	DOOR HOLDER PIECE	1	
17 (1)	VYF2487	INK CASSETTE DOOR U.	1	NV-MPD1E/B/N
17 (1)	VYF2488	INK CASSETTE DOOR U.	1	NV-MPD1MU
18 (1)	VMD2882	PAPER EJECT COVER	1	
19 (1)	VEP90365A	PAPER CASSETTE SW C.B.A.	1	(RTL)
19-1 (1)	VWJ02D5120NQ	2-PIN FLAT CABLE	1	PJ52301 - P59007
19-2 (1)	VSP1052	SWITCH	1	
20 (1)	VMD2880	PAPER CASSETTE GUIDE (F)	1	
21 (1)	VMD2881	PAPER CASSETTE GUIDE (R)	1	
22 (1)	VMA9869	EARTH PLATE	1	
23 (1)	VJR0291	TAB	1	
24 (1)	VLP0360	CORE	2	EXCEPT NV-MPD1MU
25 (1)	VMX2757	CONDUCTIVE SPACER B	1	
26 (1)	VLF1456	FERRITE CORE	1	EXCEPT NV-MPD1MU

4.3. Screws and Washers Replacement Parts List

Note:

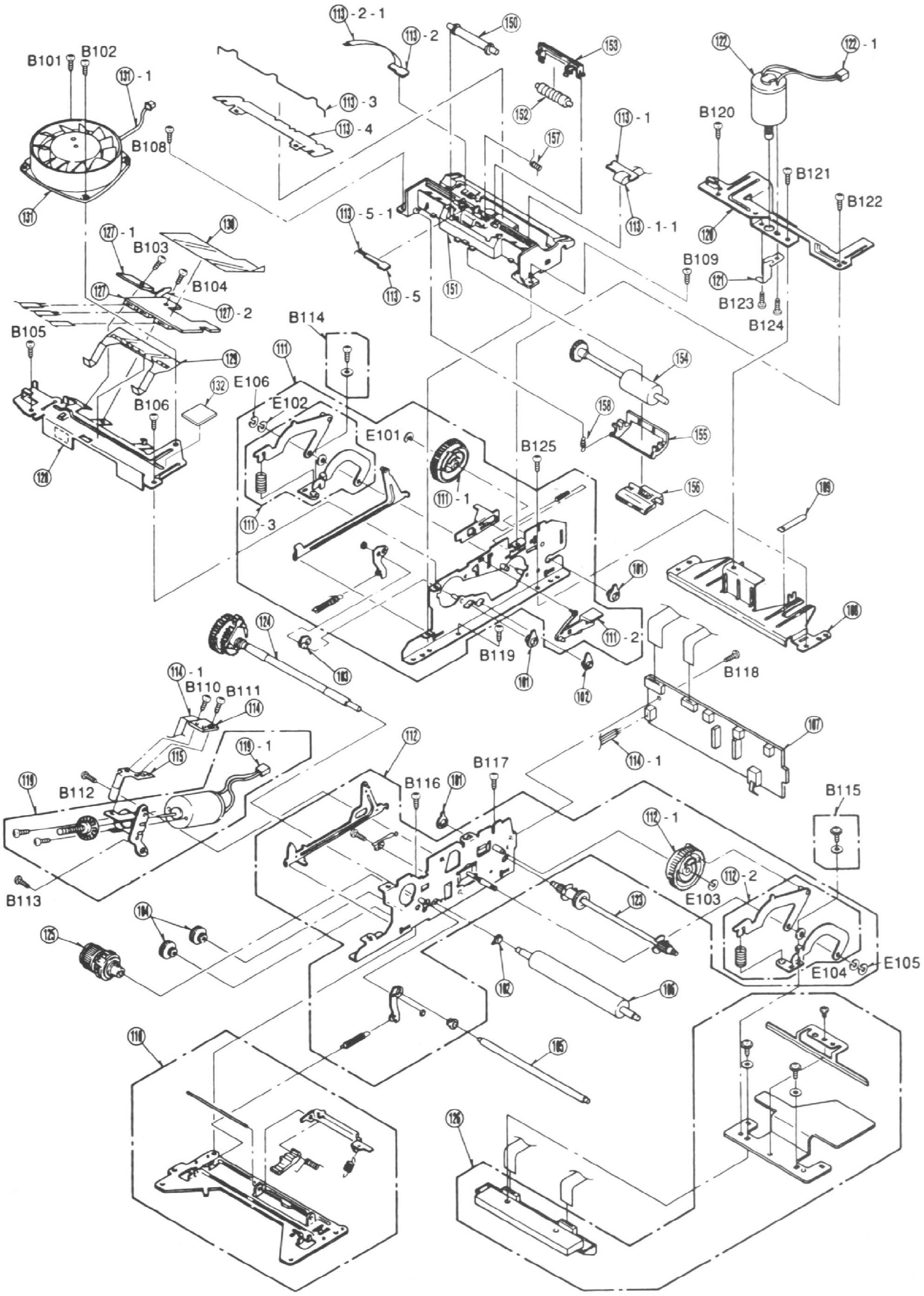
1. ***Be sure to make your orders of replacement parts according to this list.**

2. IMPORTANT SAFETY NOTICE

Components identified with the mark ⚠ have the special characteristics for safety. When replacing any of these components, use only the same type.

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
B1,2	XTV3+10JFC	SCREW	2	
B3-5	VHD1092	SCREW	3	
B6-9	XTV3+10GR	SCREW	4	
B10	XTV3+8FFZ	SCREW	1	EXCEPT NV-MPD1MU
B11,12	XSN3+6BN	SCREW	2	
B13	VHD1092	SCREW	1	
B14,15	XTV3+10JFC	SCREW	2	
B16,17	XTV26+5F-NC	SCREW	2	
B18,19	VHD1092	SCREW	2	
B20,21	XYN3+C6	SCREW	2	
B22-24	XYC3+CJ8	SCREW	3	
B25	VHD1092	SCREW	1	
B26	XTV26+5F-NC	SCREW	1	
B101-06	XTV26+5F-NC	SCREW	6	
B108-13	XTV26+5F-NC	SCREW	6	
B114,15	XYN26+F5FZ	SCREW	2	
B116-22	XTV26+5F-NC	SCREW	7	
B123,24	XSB3+3	SCREW	2	
B125	XTV26+5F-NC	SCREW	1	
B126	XYN3+C8	SCREW	4	
B127	XYN3+C10	SCREW	1	
E101	VMX2295	WASHER	1	
E102	XUC25FP	E-RING	1	
E103	VMX2295	WASHER	1	
E104	XUC25FP	E-RING	1	
E105	XWGV3D8G	WASHER	1	

4.4. Mechanism Parts Section Exploded View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4.5. Mechanism Parts Section Replacement Parts List

Note:

1. *Be sure to make your orders of replacement parts according to this list.

2. IMPORTANT SAFETY NOTICE

Components identified with the mark ⚠ have the special characteristics for safety. When

replacing any of these components, use only the same type.

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
101 (2)	VDB1249	PLATEN ROLLER HOLDER	3	
102 (2)	VDB1453	PLATEN ROLLER HOLDER A	2	
103 (2)	VDB1455	PINCH ROLLER HOLDER (F)	1	
104 (2)	VDG1244	PICKER IDLER GEAR	2	
105 (2)	VDP1673	PINCH ROLLER	1	
106 (2)	VDP1697	PLATEN ROLLER	1	
107 (2)	VEP92405A	DRIVE C.B.A.	1	(RTL)
108 (2)	VMA9639	PAPER END GUIDE	1	
109 (2)	VMX2633	PROTECT SHEET	1	
110 (2)	VXA5823	PAPER SUPPLY GUIDE U.	1	
111 (2)	VXA5824	FRONT FRAME U.	1	
111-1 (2)	VDK0153	MODE CAM GEAR (F)	1	
111-2 (2)	VML3235	INK CASSETTE EJECT LEVER	1	
111-3 (2)	VXL2724	HEAD ARM (F) U.	1	
112 (2)	VXA5827	REAR FRAME	1	
112-1 (2)	VDK0154	MODE CAM GEAR (R)	1	
112-2 (2)	VXL2726	HEAD ARM (R) U.	1	
113-1 (2)	VEP90335A	PAPER CHECK SENSOR C.B.A.	1	(RTL)
113-1-1(2)	VWJ03D5210NQ	PAPER CHECK SENSOR CABLE	1	- P59006
113-2 (2)	VXQ0593	PHOTO TRANSISTOR (1)	1	
113-2-1(2)	VEE9960	SHEET SENSOR CABLE	1	- P52702
113-3 (2)	VMM0426	CASSETTE GUIDE ROD	1	
113-4 (2)	VMD2720	SELECTION SHEET	1	
113-5 (2)	VEP90347A	PAPER OUT SENSOR C.B.A.	1	(RTL)
113-5-1(2)	VWJ03D5050NQ	PAPER OUT SENSOR CABLE	1	- P52703
114 (2)	VEP90336A	FG SENSOR C.B.A.	1	(RTL)
114-1 (2)	VWJ03D5120NQ	FG SENSOR CABLE	1	- P52006
115 (2)	VMC1309	CAPSTAN SPRING	1	
119 (2)	VXA6132	PS MOTOR ANGLE (1) U.	1	
119-1 (2)	VEE9949	PS MOTOR CABLE	1	- PP52003
120 (2)	VMA9641	FAN HOLDER	1	
121 (2)	VMC1310	WORM SPRING	1	
122 (2)	VXA5837	MODE MOTOR U.	1	
122-1 (2)	VEE9950	MODE MOTOR CABLE	1	- P52004
123 (2)	VXJ0214	CAM GEAR DRIVE SHAFT U.	1	
124 (2)	VXP1862	CAPSTAN ROLLER U.	1	
125 (2)	VXR0349	TAKEUP REEL U.	1	
126 (2)	VXA5921	THERMAL HEAD U.	1	NV-MPD1E/B/EN
126 (2)	VXA5830	THERMAL HEAD U.	1	NV-MPD1MU

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
127 (2)	VEP90337A	INK CASSETTE DET. C.B.A.	1	(RTL)
127-1 (2)	VEP90334A	INK CASSETTE C.B.A.	1	(RTL)
127-2 (2)	VWJ02D5040NN	INK CASSETTE FLAT CABLE	1	
128 (2)	VMA9640	INK CASSETTE SENSOR GUIDE	1	
129 (2)	VMD2729	PAPER EJECT SUPPORT SPRING	1	
130 (2)	VMX2767	PROTECT SHEET	1	
131 (2)	VXA6171	FAN MOTOR U.	1	
131-1 (2)	VEE9951	FAN MOTOR CABLE	1	- P52005
132 (2)	VMX2756	CONDUCTIVE SPACER A	1	
150 (2)	VDP1676	PAPER EJECT ROLLER	1	
151 (2)	VMD2712	PAPER SUPPLY CHASSIS	1	
152 (2)	VDP1671	PINCH ROLLER	1	
153 (2)	VMD2876	PINCH ROLLER HOLDER	1	
154 (2)	VXP1793	PINCH ROLLER UNIT	1	
155 (2)	VML3234	KICK LEVER	1	
156 (2)	VXA5832	PAD HOLDER	1	
157 (2)	VMB3103	SPRING	1	
158 (2)	VMB3097	SPRING	1	

4.6. Packing Parts & Accessories Section Replacement Parts List

Note:

1. ***Be sure to make your orders of replacement parts according to this list.**
2. **IMPORTANT SAFETY NOTICE**

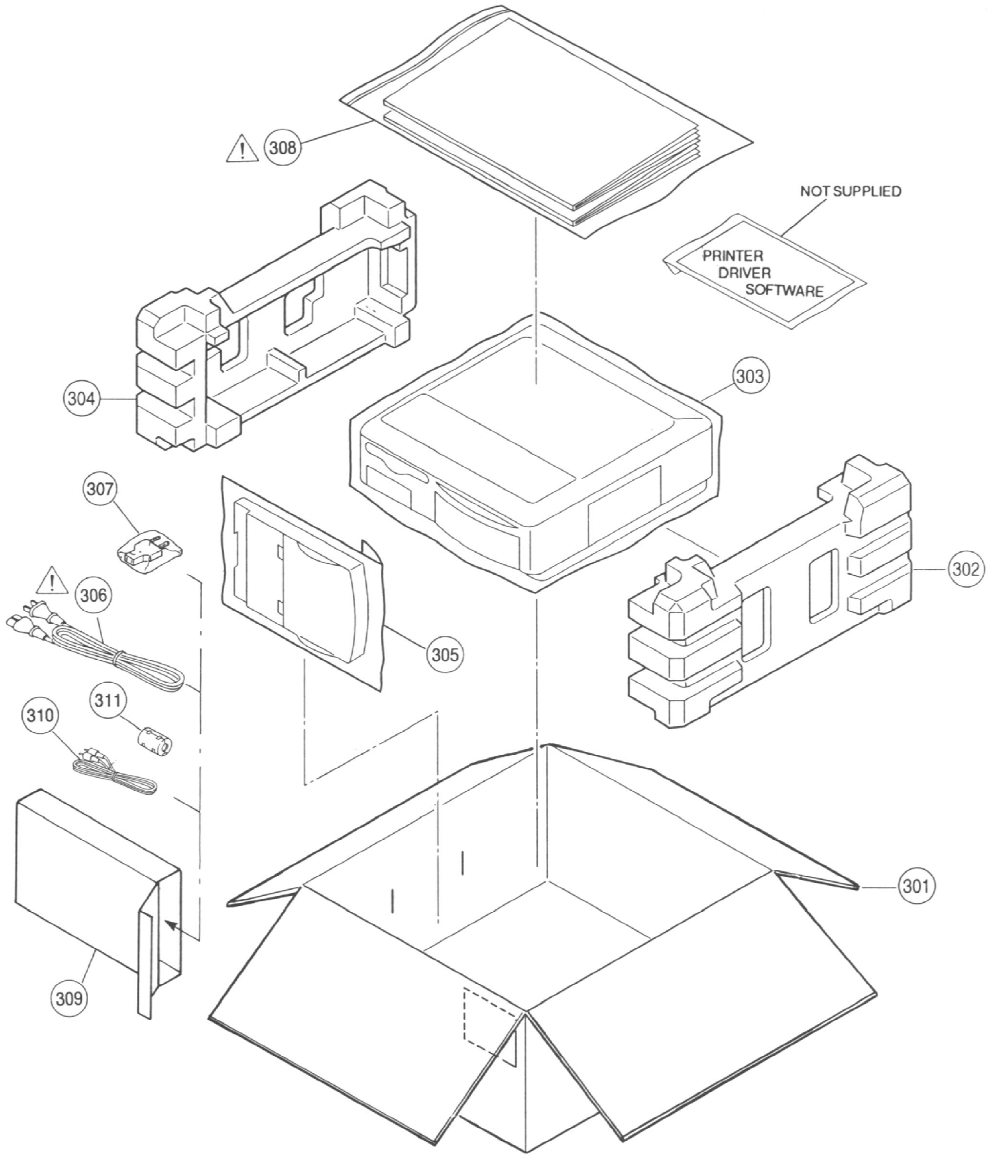
Components identified with the mark ⚠ have the special characteristics for safety. When replacing any of these components, use only the same type.

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
301 (3)	VPG9357	PACKING CASE	1	NV-MPD1E
301 (3)	VPG9358	PACKING CASE	1	NV-MPD1B
301 (3)	VPG9359	PACKING CASE	1	NV-MPD1EN
301 (3)	VPG9447	PACKING CASE	1	NV-MPD1MU
302 (3)	VPN4856	CUSHION (R)	1	
303 (3)	VPF0943	POLYETHYLENE BAG	1	
304 (3)	VPN4857	CUSHION (L)	1	
305 (3)	VXF0153	PAPER CASSETTE U.	1	NV-MPD1E/B/EN
305 (3)	VXF0156	PAPER CASSETTE U.	1	NV-MPD1MU
306 (3)⚠	VJA1039	AC CABLE	1	NV-MPD1E
306 (3)⚠	VJA0733	AC CABLE	1	NV-MPD1B
306 (3)⚠	VJA0754	AC CABLE	1	NV-MPD1EN
306 (3)⚠	VJA1039	AC CABLE	1	NV-MPD1EN
306 (3)⚠	VJA1040	AC CABLE	1	NV-MPD1MU
307 (3)	VJP2974	AC PLUG ADAPTOR	1	NV-MPD1EN ONLY
308 (3)⚠	VQT7535	OPERATING INSTRUCTIONS	1	NV-MPD1E
		(ENGLISH,GERMAN,FRENCH,		
		SPANISH)		
308 (3)⚠	VQT7537	OPERATING INSTRUCTIONS	1	NV-MPD1E
		(SWEDISH,ITALIAN,DUTCH		
		DANISH)		
308 (3)⚠	VQT7536	PRINTER DRIVER MANUAL	1	NV-MPD1E
		(ENGLISH,GERMAN,FRENCH,		
		SPANISH)		
308 (3)⚠	VQT7538	PRINTER DRIVER MANUAL	1	NV-MPD1E
		(SWEDISH,ITALIAN,DUTCH		
		DANISH)		
308 (3)⚠	VQT7539	OPERATING INSTRUCTIONS	1	NV-MPD1B
		(ENGLISH)		
308 (3)⚠	VQT7540	PRINTER DRIVER MANUAL	1	NV-MPD1B
		(ENGLISH)		
308 (3)⚠	VQT7541	OPERATING INSTRUCTIONS	1	NV-MPD1EN
		(ENGLISH,ARABIC,RUSSIAN)		
308 (3)⚠	VQT7542	PRINTER DRIVER MANUAL	1	NV-MPD1EN
		(ENGLISH,ARABIC,RUSSIAN)		
308 (3)⚠	VQT7545	OPERATING INSTRUCTIONS	1	NV-MPD1MU
309 (3)	VPK2095	ACCESSORY CASE	1	
310 (3)	VJA0815	VIDEO CABLE	1	
311 (3)	VLF1321	FERRITE CORE	1	EXCEPT NV-MPD1MU

4.7. Packing Parts & Accessories Section Exploded View

IMPORTANT SAFETY NOTICE

Components identified with the mark ⚠ have the special characteristics for safety. When replacing any of these components, use only the same type.



⚠ 308
NOT SUPPLIED
PRINTER DRIVER SOFTWARE
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⚠ 306
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4.8. Electrical Replacement Parts List

Note:

1. **Be sure to make your orders of replacement parts according to this list.**
2. **IMPORTANT SAFETY NOTICE : Components identified with the mark ⚠ have the special characteristics for safety. When replacing any of the these components, use only the same type.**
3. **Unless otherwise specified.**
4. **The P.C. Board units marked width " ■ " show below the main**

assembled parts.

5. The merking (RTL) indicaters the retention time is limited for this item. After the discontinuation of the this assembly in production, it will no longer be available.

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
	VEP96532A	MAIN C.B.A.	1	(RTL)
	VEP90366A	OPERATION C.B.A.	1	(RTL)
	VEP93312A	ANALOG C.B.A.	1	(RTL)
	VEP93302F	VIDEO JACK C.B.A.	1	(RTL)
	VEP91234A	POWER C.B.A.	1	(RTL)
	VEP96507D	I/F CONNECTION C.B.A.	1	(RTL) NV-MPD1E/B/EN
	VEP96507C	I/F CONNECTION C.B.A.	1	(RTL) NV-MPD1MU
	VEP92405A	DRIVE C.B.A.	1	(RTL)
	VEP90337A	CASSETTE DET. C.B.A.	1	(RTL)
	VEP90334A	INK CASSETTE C.B.A.	1	(RTL)
	VEP90365A	PAPER CASSETTE SW C.B.A.	1	(RTL)
	VEP90335A	PAPER CHECK SENSOR C.B.A.	1	(RTL)
	VEP90347A	PAPER OUT SENSOR C.B.A.	1	(RTL)
	VEP90336A	FG SENSOR C.B.A.	1	(RTL)
C56001	ECUX1H471JCV	C.CAPACITOR CH 50V 470P	1	
C56002	ECEV0JA470	E.CAPACITOR CH 6.3V 47U	1	
C56003	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C56004	ECUX1H102KBV	C.CAPACITOR CH 50V 1000P	1	
C56005	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C56006	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C56007	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C56008	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C56010	ECUX1H332KBV	C.CAPACITOR CH 50V 3300P	1	
C56011	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C56012	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C56013	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C56014	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C56015	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C56016	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C56017	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C56018	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C56021	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C56022	ECEV0JA470	E.CAPACITOR CH 6.3V 47U	1	
C56101	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C56102	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C56103	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C56104	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C56105	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C56106	ECUX1H471JCV	C.CAPACITOR CH 50V 470P	1	
C56107	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C56108	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C56109	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C56110	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C56111	ECUX1H221JCV	C.CAPACITOR CH 50V 220P	1	
C56112	ECUX1H221JCV	C.CAPACITOR CH 50V 220P	1	
C56113	ECUX1H221JCV	C.CAPACITOR CH 50V 220P	1	
C56114	ECUX1H221JCV	C.CAPACITOR CH 50V 220P	1	
C56115	ECUX1H221JCV	C.CAPACITOR CH 50V 220P	1	
C56116	ECUX1H221JCV	C.CAPACITOR CH 50V 220P	1	
C56117	ECUX1H221JCV	C.CAPACITOR CH 50V 220P	1	
C56118	ECUX1H221JCV	C.CAPACITOR CH 50V 220P	1	
C56119	ECUX1H221JCV	C.CAPACITOR CH 50V 220P	1	
C56120	ECUX1H221JCV	C.CAPACITOR CH 50V 220P	1	
C56121	ECUX1H221JCV	C.CAPACITOR CH 50V 220P	1	
C56122	ECUX1H221JCV	C.CAPACITOR CH 50V 220P	1	
C56123	ECUX1H221JCV	C.CAPACITOR CH 50V 220P	1	
C56124	ECUX1H221JCV	C.CAPACITOR CH 50V 220P	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C56125	ECUX1H221JCV	C.CAPACITOR CH 50V 220P	1	
C56126	ECUX1H221JCV	C.CAPACITOR CH 50V 220P	1	
C56127	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
C56128	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
C56129	ECUX1H271JCV	C.CAPACITOR CH 50V 270P	1	
C56130	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
C56131	ECUX1H271JCV	C.CAPACITOR CH 50V 270P	1	
C56132	ECUM1C105ZFM	C.CAPACITOR CH 16V 1U	1	
C56133	ECEV0JA101	E.CAPACITOR CH 6.3V 100U	1	
C56151	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C56152	ECEV0JA470	E.CAPACITOR CH 6.3V 47U	1	
C59001	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C59002	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C59003	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C59004	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C59005	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C59006	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C59007	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C59008	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C59009	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C59010	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C59011	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C59012	ECUM1C683KBV	C.CAPACITOR CH 16V 0.068U	1	
C59013	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C59014	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C59015	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C59016	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C59017	ECUX1C473KBV	C.CAPACITOR CH 16V 0.047U	1	
C59018	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C59019	ECUX1H152KBV	C.CAPACITOR CH 50V 1500P	1	
C59020	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C59021	ECUX1H102KBV	C.CAPACITOR CH 50V 1000P	1	
C59022	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C59024	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C59025	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C59027	ECUX1H102KBV	C.CAPACITOR CH 50V 1000P	1	
C59028	ECUX1H102KBV	C.CAPACITOR CH 50V 1000P	1	
C59029	ECUX1H102KBV	C.CAPACITOR CH 50V 1000P	1	
C59030	ECUX1H102KBV	C.CAPACITOR CH 50V 1000P	1	
C59031	ECUX1H102KBV	C.CAPACITOR CH 50V 1000P	1	
C59032	ECUX1H102KBV	C.CAPACITOR CH 50V 1000P	1	
C59033	ECUX1H102KBV	C.CAPACITOR CH 50V 1000P	1	
C59034	ECUX1H102KBV	C.CAPACITOR CH 50V 1000P	1	
C59035	ECUX1H102KBV	C.CAPACITOR CH 50V 1000P	1	
C59036	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C59037	ECEV0JA101	E.CAPACITOR CH 6.3V 100U	1	
C59038	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C59039	ECEV0JA101	E.CAPACITOR CH 6.3V 100U	1	
C59040	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C59041	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C59042	ECUX1H470JCV	C.CAPACITOR CH 50V 47P	1	
C59043	ECUX1H102KBV	C.CAPACITOR CH 50V 1000P	1	
C59201	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C59202	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C59203	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C59204	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C59205	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C59206	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C59207	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C59208	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C59209	ECEV0JA470	E.CAPACITOR CH 6.3V 47U	1	
C59212	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
C59214	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
C59215	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C59216	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C59217	ECUX1H090DCV	C.CAPACITOR CH 50V 90P	1	
C59218	ECUX1H090DCV	C.CAPACITOR CH 50V 90P	1	
C59219	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C59220	ECEV0JA470	E.CAPACITOR CH 6.3V 47U	1	
C59221	ECUX1H120JCV	C.CAPACITOR CH 50V 12P	1	
C59222	ECUX1H330JCV	C.CAPACITOR CH 50V 33P	1	
C59223	ECEV0JA470	E.CAPACITOR CH 6.3V 47U	1	
C59224	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C59225	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C59226	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C59227	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C59228	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C59229	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C59230	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C59231	ECEV1HAN010	E.CAPACITOR CH 50V 1U	1	
C59232	ECEV1HAN010	E.CAPACITOR CH 50V 1U	1	
C59233	ECEV1HAN010	E.CAPACITOR CH 50V 1U	1	
C59234	ECUX1H270JCV	C.CAPACITOR CH 50V 27P	1	
C59235	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C59236	ECUX1H270JCV	C.CAPACITOR CH 50V 27P	1	
C59237	ECUX1H270JCV	C.CAPACITOR CH 50V 27P	1	
C59238	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C59241	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C59242	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C59243	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C59244	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C59245	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C59246	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C59247	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C59248	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C59249	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C59250	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C59251	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C59282	ECUX1H680JCV	C.CAPACITOR CH 50V 68P	1	
C59283	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
D56102	MA141A	DIODE	1	
D56103	MA142WA	DIODE	1	
D56104	MA142WA	DIODE	1	
D56105	MA142WA	DIODE	1	
D56106	MA142WA	DIODE	1	
D56107	MA142WA	DIODE	1	
D56108	MA142WA	DIODE	1	
D56109	MA142WA	DIODE	1	
D56110	MA142WA	DIODE	1	
D56111	MA142K	DIODE	1	
D56112	MA141WK	DIODE	1	
D56113	MA141WK	DIODE	1	
D56114	MA141WK	DIODE	1	
D56115	MA141WK	DIODE	1	
D56116	MA141WK	DIODE	1	
D56117	MA141WK	DIODE	1	
D56118	MA141WK	DIODE	1	
D56119	MA141WK	DIODE	1	
D56120	MA141WK	DIODE	1	
D56121	MA142WA	DIODE	1	
D56122	MA721WA	DIODE	1	
D56123	MA142K	DIODE	1	
D56124	MA740	DIODE	1	
D59001	SLR-325VC	DIODE	1	
D59241	MA3039-H	DIODE	1	
FL59005	ELKE103FA	FILTER	1	
IC56001	HD37042AE30F	IC	1	
IC56002	TC7W14FU	IC	1	
IC56003	LH525C7N	IC	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
IC56004	PST9143NR	IC	1	
IC56005	LH531HSH	IC	1	
IC56006	TC7W32F	IC	1	
IC56007	TC7W74FU	IC	1	
IC56008	PST9143NR	IC	1	
IC56101	UPD65622G275	IC	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
IC56102	TC7W14FU	IC	1	
IC56103	TC7WU04FU	IC	1	
IC56104	MC74HC245AF	IC	1	
IC56105	MC74HC244AF	IC	1	
IC56106	MC74HC244AF	IC	1	
IC59201	HG72C012FD	IC	1	
IC59202	M5M44800CJ6	IC	1	
IC59203	M5M44800CJ6	IC	1	
IC59204	UPD6461GS658	IC	1	
IC59205	MC14053BF	IC	1	
L59281	VLQ0163J390	COIL 39UH	1	
L59282	VLQ0163J180	COIL 18UH	1	
LB56101	VLP0154	COIL	1	
LB56102	VLP0323A102	CHIP SOLID INDUCTOR	1	
LB56103	VLP0175	COIL	1	
LB56104	VLP0175	COIL	1	
LB59001	VLF1315A102	CHIP BEAD	1	
LB59002	VLF1315A102	CHIP BEAD	1	
LB59003	VLF1315A102	CHIP BEAD	1	
LB59004	VLF1315A102	CHIP BEAD	1	
LB59005	VLP0335	COIL	1	
LB59201	VLP0196	CHIP INDUCTOR	1	
P59001	VJS2650A008Z	CONNECTOR (FEMALE) 8P	1	
P59002	VJS3537A008G	CONNECTOR (FEMALE) 8P	1	
P59003	VJS3537A008G	CONNECTOR (FEMALE) 8P	1	
P59004	VJS2181	CONNECTOR (FEMALE) 11P	1	
P59005	VJS4059C014W	CONNECTOR (FEMALE) 14P	1	
P59006	VJS2650A003Z	CONNECTOR (FEMALE) 3P	1	
P59007	VJS2650A002Z	CONNECTOR (FEMALE) 2P	1	
P59008	VJS4059C020W	CONNECTOR (FEMALE) 20P	1	
P59009	VJS4059C025W	CONNECTOR (FEMALE) 25P	1	
P59010	VJP4031	PC CARD CONNECTOR	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
Q56001	2SD1819	TRANSISTOR	1	
Q56101	2SJ165	TRANSISTOR	1	
Q59201	2SB1218-R	TRANSISTOR	1	
Q59202	2SB1218-R	TRANSISTOR	1	
Q59203	2SB1218-R	TRANSISTOR	1	
Q59231	XN1B301	TRANSISTOR	1	
Q59232	XN1B301	TRANSISTOR	1	
Q59233	XN1B301	TRANSISTOR	1	
Q59241	XN1B301	TRANSISTOR	1	
Q59242	XN1B301	TRANSISTOR	1	
Q59243	XN5601	TRANSISTOR	1	
Q59244	2SD1819	TRANSISTOR	1	
Q59282	2SB1218-R	TRANSISTOR	1	
QR56001	UN5213	TRANSISTOR-RESISTOR	1	
QR56002	UN5213	TRANSISTOR-RESISTOR	1	
QR56003	UN5213	TRANSISTOR-RESISTOR	1	
QR59001	UN5213	TRANSISTOR-RESISTOR	1	
QR59201	UN5213	TRANSISTOR-RESISTOR	1	
QR59202	UN5213	TRANSISTOR-RESISTOR	1	
QR59281	UN5213	TRANSISTOR-RESISTOR	1	
QR59282	UN5213	TRANSISTOR-RESISTOR	1	
R56001	ERJ3GEYG302	M.RESISTOR CH 1/16W 3K	1	
R56002	ERJ3GEYG201	M.RESISTOR CH 1/16W 200	1	
R56003	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
R56004	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R56005	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R56006	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R56007	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R56008	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R56009	ERJ3GEYJ201	M.RESISTOR CH 1/16W 200	1	
R56013	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R56014	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R56021	ERJ3GEYJ121	M.RESISTOR CH 1/16W 120	1	
R56022	ERJ3GEYJ121	M.RESISTOR CH 1/16W 120	1	
R56023	ERJ3GEYJ121	M.RESISTOR CH 1/16W 120	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R56024	ERJ3GEYJ121	M.RESISTOR CH 1/16W 120	1	
R56025	ERJ3GEYJ121	M.RESISTOR CH 1/16W 120	1	
R56026	ERJ3GEYJ121	M.RESISTOR CH 1/16W 120	1	
R56027	ERJ3GEYJ121	M.RESISTOR CH 1/16W 120	1	
R56028	ERJ3GEYJ121	M.RESISTOR CH 1/16W 120	1	
R56029	ERJ3GEYJ121	M.RESISTOR CH 1/16W 120	1	
R56030	ERJ3GEYJ121	M.RESISTOR CH 1/16W 120	1	
R56031	ERJ3GEYJ121	M.RESISTOR CH 1/16W 120	1	
R56032	ERJ3GEYJ121	M.RESISTOR CH 1/16W 120	1	
R56033	ERJ3GEYJ121	M.RESISTOR CH 1/16W 120	1	
R56034	ERJ3GEYJ121	M.RESISTOR CH 1/16W 120	1	
R56035	ERJ3GEYJ121	M.RESISTOR CH 1/16W 120	1	
R56036	ERJ3GEYJ121	M.RESISTOR CH 1/16W 120	1	
R56037	ERJ3GEYJ121	M.RESISTOR CH 1/16W 120	1	
R56038	ERJ3GEYJ121	M.RESISTOR CH 1/16W 120	1	
R56039	ERJ3GEYJ121	M.RESISTOR CH 1/16W 120	1	
R56040	ERJ3GEYJ121	M.RESISTOR CH 1/16W 120	1	
R56041	ERJ3GEYJ121	M.RESISTOR CH 1/16W 120	1	
R56042	ERJ3GEYJ121	M.RESISTOR CH 1/16W 120	1	
R56043	ERJ3GEYJ121	M.RESISTOR CH 1/16W 120	1	
R56044	ERJ3GEYJ121	M.RESISTOR CH 1/16W 120	1	
R56045	ERJ3GEYJ121	M.RESISTOR CH 1/16W 120	1	
R56046	ERJ3GEYJ121	M.RESISTOR CH 1/16W 120	1	
R56047	ERJ3GEYJ121	M.RESISTOR CH 1/16W 120	1	
R56048	ERJ3GEYJ121	M.RESISTOR CH 1/16W 120	1	
R56101	ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	1	
R56102	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	1	
R56103	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	1	
R56104	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R56105	ERJ3GEYJ223	M.RESISTOR CH 1/ 16W 22K	1	
R56106	ERJ3GEYJ223	M.RESISTOR CH 1/ 16W 22K	1	
R56107	ERJ6GEYJ1R0	M.RESISTOR CH 1/ 10W 1	1	
R56108	ERJ3GEYJ223	M.RESISTOR CH 1/ 16W 22K	1	
R56111	ERJ3GEYJ392	M.RESISTOR CH 1/ 16W 3.9K	1	
R56112	ERJ3GEYJ122	M.RESISTOR CH 1/ 16W 1.2K	1	
R56113	ERJ3GEYJ122	M.RESISTOR CH 1/ 16W 1.2K	1	
R56114	ERJ3GEYJ122	M.RESISTOR CH 1/ 16W 1.2K	1	
R56115	ERJ3GEYJ821	M.RESISTOR CH 1/ 16W 820	1	
R56116	ERJ3GEYJ821	M.RESISTOR CH 1/ 16W 820	1	
R56117	ERJ3GEYJ122	M.RESISTOR CH 1/ 16W 1.2K	1	
R56118	ERJ3GEYJ122	M.RESISTOR CH 1/ 16W 1.2K	1	
R56119	ERJ3GEYJ122	M.RESISTOR CH 1/ 16W 1.2K	1	
R56120	ERJ3GEYJ122	M.RESISTOR CH 1/ 16W 1.2K	1	
R56121	ERJ3GEYJ122	M.RESISTOR CH 1/ 16W 1.2K	1	
R56122	ERJ3GEYJ122	M.RESISTOR CH 1/ 16W 1.2K	1	
R56123	ERJ3GEYJ122	M.RESISTOR CH 1/ 16W 1.2K	1	
R56124	ERJ3GEYJ122	M.RESISTOR CH 1/ 16W 1.2K	1	
R56125	ERJ3GEYJ122	M.RESISTOR CH 1/ 16W 1.2K	1	
R56126	ERJ3GEYJ821	M.RESISTOR CH 1/ 16W 820	1	
R56127	ERJ3GEYJ821	M.RESISTOR CH 1/ 16W 820	1	
R56128	ERJ3GEYJ821	M.RESISTOR CH 1/ 16W 820	1	
R56129	ERJ3GEYG102	M.RESISTOR CH 1/ 16W 1K	1	
R56130	ERJ3GEYG102	M.RESISTOR CH 1/ 16W 1K	1	
R56131	ERJ3GEYG102	M.RESISTOR CH 1/ 16W 1K	1	
R56132	ERJ3GEYG102	M.RESISTOR CH 1/ 16W 1K	1	
R56133	ERJ3GEYG102	M.RESISTOR CH 1/ 16W 1K	1	
R56134	ERJ3GEYG102	M.RESISTOR CH 1/ 16W 1K	1	
R56135	ERJ3GEYG102	M.RESISTOR CH 1/ 16W 1K	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R56136	ERJ3GEYG102	M.RESISTOR CH 1/ 16W 1K	1	
R56137	ERJ3GEYG102	M.RESISTOR CH 1/ 16W 1K	1	
R56138	ERJ3GEYG102	M.RESISTOR CH 1/ 16W 1K	1	
R56139	ERJ3GEYG102	M.RESISTOR CH 1/ 16W 1K	1	
R56140	ERJ3GEYG102	M.RESISTOR CH 1/ 16W 1K	1	
R56143	ERJ3GEYJ470	M.RESISTOR CH 1/ 16W 47	1	
R56146	ERJ3GEYJ331	M.RESISTOR CH 1/ 16W 330	1	
R56147	ERJ3GEYG102	M.RESISTOR CH 1/ 16W 1K	1	
R56148	ERJ3GEYJ680	M.RESISTOR CH 1/ 16W 68	1	
R56149	ERJ3GEYJ100	M.RESISTOR CH 1/ 16W 10	1	
R56151	ERJ3GEYJ223	M.RESISTOR CH 1/ 16W 22K	1	
R56152	ERJ3GEYJ223	M.RESISTOR CH 1/ 16W 22K	1	
R56153	ERJ3GEYJ223	M.RESISTOR CH 1/ 16W 22K	1	
R56154	ERJ3GEYJ223	M.RESISTOR CH 1/ 16W 22K	1	
R56155	ERJ3GEYJ223	M.RESISTOR CH 1/ 16W 22K	1	
R56161	ERJ3GEY0R00	M.RESISTOR CH 1/ 16W 0	1	
R56162	ERJ3GEY0R00	M.RESISTOR CH 1/ 16W 0	1	
R56163	ERJ3GEY0R00	M.RESISTOR CH 1/ 16W 0	1	
R56164	ERJ3GEY0R00	M.RESISTOR CH 1/ 16W 0	1	
R56165	ERJ3GEY0R00	M.RESISTOR CH 1/ 16W 0	1	
R56166	ERJ3GEY0R00	M.RESISTOR CH 1/ 16W 0	1	
R56167	ERJ3GEY0R00	M.RESISTOR CH 1/ 16W 0	1	
R56168	ERJ3GEY0R00	M.RESISTOR CH 1/ 16W 0	1	
R56169	ERJ3GEY0R00	M.RESISTOR CH 1/ 16W 0	1	
R56170	ERJ3GEY0R00	M.RESISTOR CH 1/ 16W 0	1	
R56171	ERJ3GEY0R00	M.RESISTOR CH 1/ 16W 0	1	
R56172	ERJ3GEY0R00	M.RESISTOR CH 1/ 16W 0	1	
R56173	ERJ3GEY0R00	M.RESISTOR CH 1/ 16W 0	1	
R56174	ERJ3GEY0R00	M.RESISTOR CH 1/ 16W 0	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R56175	ERJ3GEY0R00	M.RESISTOR CH 1/ 16W 0	1	
R56176	ERJ3GEY0R00	M.RESISTOR CH 1/ 16W 0	1	
R56177	ERJ3GEY0R00	M.RESISTOR CH 1/ 16W 0	1	
R56178	ERJ3GEY0R00	M.RESISTOR CH 1/ 16W 0	1	
R56179	ERJ3GEY0R00	M.RESISTOR CH 1/ 16W 0	1	
R56180	ERJ3GEY0R00	M.RESISTOR CH 1/ 16W 0	1	
R56181	ERJ3GEY0R00	M.RESISTOR CH 1/ 16W 0	1	
R56182	ERJ3GEY0R00	M.RESISTOR CH 1/ 16W 0	1	
R56183	ERJ3GEY0R00	M.RESISTOR CH 1/ 16W 0	1	
R56184	ERJ3GEY0R00	M.RESISTOR CH 1/ 16W 0	1	
R59001	ERJ3GEYJ181	M.RESISTOR CH 1/ 16W 180	1	
R59002	ERJ3GEYJ181	M.RESISTOR CH 1/ 16W 180	1	
R59004	ERJ3GEYJ101	M.RESISTOR CH 1/ 16W 100	1	
R59005	ERJ3GEYJ181	M.RESISTOR CH 1/ 16W 180	1	
R59006	ERJ3GEYJ181	M.RESISTOR CH 1/ 16W 180	1	
R59007	ERJ3GEYJ181	M.RESISTOR CH 1/ 16W 180	1	
R59008	ERJ3GEYJ181	M.RESISTOR CH 1/ 16W 180	1	
R59009	ERJ3GEYJ181	M.RESISTOR CH 1/ 16W 180	1	
R59010	ERJ3GEYJ181	M.RESISTOR CH 1/ 16W 180	1	
R59013	ERJ3GEYG223	M.RESISTOR CH 1/ 16W 22K	1	
R59014	ERJ3GEYJ103	M.RESISTOR CH 1/ 16W 10K	1	
R59015	ERJ3GEYJ103	M.RESISTOR CH 1/ 16W 10K	1	
R59016	ERJ3GEYJ333	M.RESISTOR CH 1/ 16W 33K	1	
R59017	ERJ3GEYJ473	M.RESISTOR CH 1/ 16W 47K	1	
R59018	ERJ3GEYJ473	M.RESISTOR CH 1/ 16W 47K	1	
R59019	ERJ3GEYJ473	M.RESISTOR CH 1/ 16W 47K	1	
R59020	ERJ3GEYJ103	M.RESISTOR CH 1/ 16W 10K	1	
R59021	ERJ3GEYJ153	M.RESISTOR CH 1/ 16W 15K	1	
R59022	ERJ3GEYJ153	M.RESISTOR CH 1/ 16W 15K	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R59023	ERJ3GEYJ181	M.RESISTOR CH 1/16W 180	1	
R59024	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R59025	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R59027	ERJ3GEYJ271	M.RESISTOR CH 1/16W 270	1	
R59028	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R59051	ERJ3GEYJ391	M.RESISTOR CH 1/16W 390	1	
R59052	ERJ3GEYJ391	M.RESISTOR CH 1/16W 390	1	
R59053	ERJ3GEYJ391	M.RESISTOR CH 1/16W 390	1	
R59054	ERJ3GEYJ392	M.RESISTOR CH 1/16W 3.9K	1	
R59055	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R59056	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R59057	ERJ3GEYJ391	M.RESISTOR CH 1/16W 390	1	
R59058	ERJ3GEYJ391	M.RESISTOR CH 1/16W 390	1	
R59059	ERJ3GEYJ391	M.RESISTOR CH 1/16W 390	1	
R59060	ERJ3GEYJ391	M.RESISTOR CH 1/16W 390	1	
R59061	ERJ3GEYJ391	M.RESISTOR CH 1/16W 390	1	
R59201	ERJ3GEYJ153	M.RESISTOR CH 1/16W 15K	1	
R59202	ERJ3GEYJ392	M.RESISTOR CH 1/16W 3.9K	1	
R59203	ERJ3GEYJ561	M.RESISTOR CH 1/16W 560	1	
R59204	ERJ3GEYJ561	M.RESISTOR CH 1/16W 560	1	
R59205	ERJ3GEYJ561	M.RESISTOR CH 1/16W 560	1	
R59206	ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	1	
R59207	ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	1	
R59208	ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	1	
R59209	ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	1	
R59210	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	1	
R59211	ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	1	
R59212	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R59213	ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R59214	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R59217	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	1	
R59218	ERJ3GEYJ151	M.RESISTOR CH 1/16W 150	1	
R59219	ERJ3GEYJ151	M.RESISTOR CH 1/16W 150	1	
R59220	ERJ3GEYJ151	M.RESISTOR CH 1/16W 150	1	
R59221	ERJ3GEYJ151	M.RESISTOR CH 1/16W 150	1	
R59222	ERJ3GEYJ151	M.RESISTOR CH 1/16W 150	1	
R59223	ERJ3GEYJ151	M.RESISTOR CH 1/16W 150	1	
R59224	ERJ3GEYJ151	M.RESISTOR CH 1/16W 150	1	
R59225	ERJ3GEYJ151	M.RESISTOR CH 1/16W 150	1	
R59226	ERJ3GEYJ151	M.RESISTOR CH 1/16W 150	1	
R59227	ERJ3GEYJ151	M.RESISTOR CH 1/16W 150	1	
R59228	ERJ3GEYJ151	M.RESISTOR CH 1/16W 150	1	
R59229	ERJ3GEYJ151	M.RESISTOR CH 1/16W 150	1	
R59230	ERJ3GEYJ151	M.RESISTOR CH 1/16W 150	1	
R59231	ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	1	
R59232	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R59233	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R59234	ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	1	
R59235	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R59236	ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	1	
R59241	ERJ3GEYG103	M.RESISTOR CH 1/16W 10K	1	
R59242	ERJ3GEYG103	M.RESISTOR CH 1/16W 10K	1	
R59243	ERJ3GEYG103	M.RESISTOR CH 1/16W 10K	1	
R59244	ERJ3GEYG203	M.RESISTOR CH 1/16W 20K	1	
R59246	ERJ3GEYJ271	M.RESISTOR CH 1/16W 270	1	
R59247	ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	1	
R59248	ERJ3GEYJ122	M.RESISTOR CH 1/16W 1.2K	1	
R59250	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R59251	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	1	
R59261	ERJ3GEYJ151	M.RESISTOR CH 1/16W 150	1	
R59262	ERJ3GEYJ151	M.RESISTOR CH 1/16W 150	1	
R59263	ERJ3GEYJ151	M.RESISTOR CH 1/16W 150	1	
R59264	ERJ3GEYJ151	M.RESISTOR CH 1/16W 150	1	
R59265	ERJ3GEYJ151	M.RESISTOR CH 1/16W 150	1	
R59266	ERJ3GEYJ151	M.RESISTOR CH 1/16W 150	1	
R59267	ERJ3GEYJ151	M.RESISTOR CH 1/16W 150	1	
R59268	ERJ3GEYJ151	M.RESISTOR CH 1/16W 150	1	
R59269	ERJ3GEYJ151	M.RESISTOR CH 1/16W 150	1	
R59270	ERJ3GEYJ151	M.RESISTOR CH 1/16W 150	1	
R59271	ERJ3GEYJ151	M.RESISTOR CH 1/16W 150	1	
R59272	ERJ3GEYJ151	M.RESISTOR CH 1/16W 150	1	
R59273	ERJ3GEYJ151	M.RESISTOR CH 1/16W 150	1	
R59274	ERJ3GEYJ151	M.RESISTOR CH 1/16W 150	1	
R59275	ERJ3GEYJ151	M.RESISTOR CH 1/16W 150	1	
R59276	ERJ3GEYJ151	M.RESISTOR CH 1/16W 150	1	
R59284	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R59285	ERJ3GEYJ183	M.RESISTOR CH 1/16W 18K	1	
R59286	ERJ3GEYJ333	M.RESISTOR CH 1/16W 33K	1	
R59287	ERJ3GEYG471	M.RESISTOR CH 1/16W 470	1	
R59288	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R59289	ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	1	
R59290	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
X56001	EFOEC6754A4	FILTER	1	
X56101	VSX0858	CERAMIC OSCILLATOR	1	
X59201	VSX0834	CRYSTAL OSCILLATOR	1	
X59202	VSX1009	CRYSTAL OSCILLATOR	1	
ZA59001	VSC4711	SHIELD COVER (UPPER)	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
ZA59002	VSC4712	SHIELD COVER (LOWER)	1	
ZA59003	XQN2+CF10	SCREW	1	
ZA59008	XQN2+CF10	SCREW	1	
ZB59001	VXQ0702	BLINDER HOLDER UNIT	1	
·	VWJ08HW060BB	8-PIN FLAT CARD CABLE	1	P59002 - P52701
·	VWJ08HW110BB	8-PIN FLAT CARD CABLE	1	P59003 - THERMAL HEAD
·	VWJ11HW125BB	11-PIN FLAT CARD CABLE	1	P59004 - P52002
C56201	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C56202	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C56203	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
D56201	SLR-325VC	DIODE	1	
D56202	SLR-325MC	DIODE	1	
D56203	SLR-325VC	DIODE	1	
D56204	SLR-325MC	DIODE	1	
D56205	1SS254	DIODE	1	
D56206	1SS254	DIODE	1	
D56207	1SS254	DIODE	1	
D56208	1SS254	DIODE	1	
D56209	1SS254	DIODE	1	
D56210	1SS254	DIODE	1	
D56211	1SS254	DIODE	1	
D56212	1SS254	DIODE	1	
D56213	1SS254	DIODE	1	
D56214	1SS254	DIODE	1	
D56215	1SS254	DIODE	1	
D56216	1SS254	DIODE	1	
D56217	1SS254	DIODE	1	
D56218	1SS254	DIODE	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
D56220	1SS254	DIODE	1	
D56221	1SS254	DIODE	1	
D56222	1SS254	DIODE	1	
D56223	1SS254	DIODE	1	
P56201	VJS3611B014W	CONNECTOR (FEMALE) 14P	1	
QR56201	MUN2111	TRANSISTOR-RESISTOR	1	
QR56202	MUN2213	TRANSISTOR-RESISTOR	1	
QR56203	MUN2213	TRANSISTOR-RESISTOR	1	
R56201	ERJ3GEYJ271	M.RESISTOR CH 1/16W 270	1	
R56202	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R56203	ERJ3GEYJ271	M.RESISTOR CH 1/16W 270	1	
R56204	ERJ3GEYJ271	M.RESISTOR CH 1/16W 270	1	
R56205	ERJ3GEYJ271	M.RESISTOR CH 1/16W 270	1	
R56206	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R56207	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R56208	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R56209	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R56210	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
S56201	EVQ11404M	SWITCH	1	
S56202	EVQ11404M	SWITCH	1	
S56203	EVQ11404M	SWITCH	1	
S56204	EVQ11404M	SWITCH	1	
S56205	EVQ11404M	SWITCH	1	
S56206	EVQ11404M	SWITCH	1	
S56207	EVQ11404M	SWITCH	1	
S56208	EVQ11404M	SWITCH	1	
S56209	EVQ11404M	SWITCH	1	
S56210	EVQ11404M	SWITCH	1	
S56211	EVQ11404M	SWITCH	1	
S56212	EVQ11404M	SWITCH	1	
S56213	EVQ11404M	SWITCH	1	
S56214	EVQ11404M	SWITCH	1	
S56215	EVQ11404M	SWITCH	1	
S56216	VSS0546	SLIDE SWITCH	1	
S56217	ESD172254	SLIDE SWITCH	1	
.	VWJ1249	FLAT CARD CABLE	1	P56201 - P59005
C53001	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C53002	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C53003	ECUX1C104ZF	C.CAPACITOR CH 16V	1	

C53003	**ECUX1C104ZFV**	**C.CAPACITOR CH 16V 0.1U**	**1**	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C53004	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C53102	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C53201	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C53202	ECEA1CKS100	E.CAPACITOR 16V 10U	1	
C53203	ECEA1CKS100	E.CAPACITOR 16V 10U	1	
C53205	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C53206	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C53401	ECHU1H102JB	P.CAPACITOR CH 50V 1000P	1	
C53402	ECEV1HA3R3R	E.CAPACITOR CH 50V 3.3U	1	
C53403	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C53404	ECQV1H474JM	P.CAPACITOR 50V 0.47U	1	
C53405	ECEV1EAN3R3	E.CAPACITOR CH 50V 3.3U	1	
C53406	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C53407	ECUX1H271JCV	C.CAPACITOR CH 50V 270P	1	
C53408	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C53409	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C53410	ECQB1C473JB	P.CAPACITOR 16V 0.047U	1	
C53411	ECEV1HA010SR	E.CAPACITOR CH 50V 1U	1	
C53412	ECHU1H102JB	P.CAPACITOR CH 50V 1000P	1	
C53413	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C53414	ECEV0JA470	E.CAPACITOR CH 6.3V 47U	1	
C53415	ECEV1HA010SR	E.CAPACITOR CH 50V 1U	1	
C53416	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C53417	ECEV0JA101	E.CAPACITOR CH 6.3V 100U	1	
C53419	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C53420	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C53422	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C53423	ECUX1H050DCV	C.CAPACITOR CH 50V 5P	1	
C53424	ECUX1H561JCV	C.CAPACITOR CH 50V 560P	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C53425	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C53426	ECUX1H680JCV	C.CAPACITOR CH 50V 68P	1	
C53427	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C53428	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
C53429	ECEV1CA470P	E.CAPACITOR CH 16V 47U	1	
C53430	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C53432	ECUX1H390JCV	C.CAPACITOR CH 50V 39P	1	
C53433	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
C53434	ECUX1H121JCV	C.CAPACITOR CH 50V 120P	1	
C53435	ECUX1H390JCV	C.CAPACITOR CH 50V 39P	1	
C53436	ECUX1H121JCV	C.CAPACITOR CH 50V 120P	1	
C53437	ECEV1CA470P	E.CAPACITOR CH 16V 47U	1	
C53438	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C53439	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C53440	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C53441	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C53444	ECEV0JA470	E.CAPACITOR CH 6.3V 47U	1	
C53445	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C53446	ECUX1H471JCV	C.CAPACITOR CH 50V 470P	1	
C53447	ECQB1C683JB	P.CAPACITOR 16V 0.068U	1	
C53448	ECUX1H561JCV	C.CAPACITOR CH 50V 560P	1	
C53449	ECEV1HAR47	E.CAPACITOR CH 50V 0.47U	1	
C53450	ECEV1EA4R7R	E.CAPACITOR CH 25V 4.7U	1	
C53451	ECUX1H561JCV	C.CAPACITOR CH 50V 560P	1	
C53452	ECEV0JA330	E.CAPACITOR CH 6.3V 33U	1	
C53453	ECQB1H392JB	P.CAPACITOR 50V 3900P	1	
C53454	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C53455	ECUX1H152KBV	C.CAPACITOR CH 50V 1500P	1	
C53603	ECUX1H151JCV	C.CAPACITOR CH 50V 150P	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C53604	ECEV1CAN4R7R	E.CAPACITOR CH 16V 4.7U	1	
C53605	ECEV1CAN4R7R	E.CAPACITOR CH 16V 4.7U	1	
C53606	ECEV1EA4R7R	E.CAPACITOR CH 25V 4.7U	1	
C53608	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C53609	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C53610	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C53611	ECEV1CA100	E.CAPACITOR CH 16V 10U	1	
C53612	ECEV0JA101	E.CAPACITOR CH 6.3V 100U	1	
C53613	ECEV1CA100	E.CAPACITOR CH 16V 10U	1	
C53614	ECUX1H820JCV	C.CAPACITOR CH 50V 82P	1	
C53615	ECUX1H820JCV	C.CAPACITOR CH 50V 82P	1	
C53616	ECUX1H820JCV	C.CAPACITOR CH 50V 82P	1	
C53617	ECUX1H220JCV	C.CAPACITOR CH 50V 22P	1	
C53618	ECUX1H220JCV	C.CAPACITOR CH 50V 22P	1	
C53619	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C53622	ECEV1CA100	E.CAPACITOR CH 16V 10U	1	
C53623	ECEV1CA100	E.CAPACITOR CH 16V 10U	1	
C53624	ECUX1H100DCV	C.CAPACITOR CH 50V 10P	1	
D53002	MA151WK	DIODE	1	
D53010	MA151WK	DIODE	1	
D53401	MA142K	DIODE	1	
FL53201	ELB4E040B	FILTER	1	
FL53401	ELB4S050	FILTER	1	
FL53601	ELB4E038	FILTER	1	
FL53602	ELB4B102	FILTER	1	
IC53201	M52065FP	IC	1	
IC53401	M51271FP	IC	1	
IC53402	TDA4665T/V4	IC	1	
IC53403	AN3296S	IC	1	
IC53601	CXA1229M	IC	1	
JA1	VEE0C80	WIRE CABLE	1	
JK53001	VEJ1797	FRONT JACK PLATE	1	VIDEO/S-VIDEO/ EDIT
L53401	VLQ0163J220	COIL 22UH	1	
L53402	VLQ0163J180	COIL 18UH	1	
L53403	VLQ0163J101	COIL 100UH	1	
L53404	VLQ0163J101	COIL 100UH	1	
L53603	VLQ0163J180	COIL 18UH	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
LB53001	VLP0335	COIL	1	
LB53002	VLP0335	COIL	1	
LB53003	VLP0335	COIL	1	
P53001	VJS2651B003Z	CONNECTOR (FEMALE) 3P	1	
P53002	VJS4059C020W	CONNECTOR (FEMALE) 20P	1	
P53003	VJP3234B002	CONNECTOR (MALE) 2P	1	
PP53001	VJP3043G008W	CONNECTOR (MALE) 8P	1	
PS53001	VJS3043F008W	CONNECTOR (FEMALE) 8P	1	
Q53001	MSD601-R	TRANSISTOR	1	
Q53002	MSD601-R	TRANSISTOR	1	
Q53003	MSD601-R	TRANSISTOR	1	
Q53401	2SB1218-R	TRANSISTOR	1	
Q53402	2SD1819	TRANSISTOR	1	
Q53403	2SD1819	TRANSISTOR	1	
Q53404	2SB1218-R	TRANSISTOR	1	
Q53405	2SB1218-R	TRANSISTOR	1	
Q53406	2SD1819	TRANSISTOR	1	
Q53407	2SD1819	TRANSISTOR	1	
Q53408	2SB1218-R	TRANSISTOR	1	
Q53409	2SB1218-R	TRANSISTOR	1	
Q53410	2SD1819	TRANSISTOR	1	
Q53411	2SB1218-R	TRANSISTOR	1	
Q53412	MSD602-R	TRANSISTOR	1	
Q53413	2SB1218-R	TRANSISTOR	1	
Q53414	2SD1819	TRANSISTOR	1	
Q53415	2SD1819	TRANSISTOR	1	
Q53601	2SD1819	TRANSISTOR	1	
Q53602	2SD1819	TRANSISTOR	1	
Q53604	2SD1819	TRANSISTOR	1	
Q53605	2SD1819	TRANSISTOR	1	
Q53606	2SB1218-R	TRANSISTOR	1	
Q53607	2SB1218-R	TRANSISTOR	1	
Q53608	2SB1218-R	TRANSISTOR	1	
Q53609	2SD1819	TRANSISTOR	1	
Q53610	2SD1819	TRANSISTOR	1	
QR53001	MUN2214	TRANSISTOR-RESISTOR	1	
QR53601	UN5213	TRANSISTOR-RESISTOR	1	
QR53602	UN5113	TRANSISTOR-RESISTOR	1	
QR53603	UN5113	TRANSISTOR-RESISTOR	1	
R53001	ERJ3GEYJ750	M.RESISTOR CH 1/16W 75	1	
R53003	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	1	
R53004	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R53005	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R53006	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R53007	ERJ3GEYJ124	M.RESISTOR CH 1/16W 120K	1	
R53008	ERJ3GEYG822	M.RESISTOR CH 1/16W 8.2K	1	
R53009	ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	1	
R53010	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R53011	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R53012	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R53013	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R53014	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R53017	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R53018	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R53019	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R53020	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R53201	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R53202	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R53401	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R53402	ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	1	
R53403	ERJ6ENF1692	M.RESISTOR CH1/10W 6.9K	1	
R53404	ERJ3GEYJ824	M.RESISTOR CH 1/16W 820K	1	
R53405	ERJ3GEYG333	M.RESISTOR CH 1/16W 33K	1	
R53406	ERJ3GEYG183	M.RESISTOR CH 1/16W 18K	1	
R53408	ERJ3GEYJ124	M.RESISTOR CH 1/16W 120K	1	
R53409	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1	
R53410	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R53411	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R53412	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R53413	ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	1	
R53414	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R53415	ERJ3GEYJ474	M.RESISTOR CH 1/16W 470K	1	
R53416	ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	1	
R53417	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R53419	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R53420	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1	
R53421	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R53422	ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	1	
R53423	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R53424	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R53425	ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	1	
R53426	ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	1	
R53427	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R53429	ERJ3GEYJ151	M.RESISTOR CH 1/16W 150	1	
R53430	ERJ3GEYJ391	M.RESISTOR CH 1/16W 390	1	
R53431	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R53432	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1	
R53433	ERJ3GEYJ821	M.RESISTOR CH 1/16W 820	1	
R53434	ERJ3GEYJ122	M.RESISTOR CH 1/16W 1.2K	1	
R53435	ERJ3GEYG682	M.RESISTOR CH 1/16W 6.8K	1	
R53436	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R53437	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R53438	ERJ3GEYJ391	M.RESISTOR CH 1/16W 390	1	
R53441	ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	1	
R53442	ERJ3GEYJ561	M.RESISTOR CH 1/16W 560	1	
R53443	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R53444	ERJ3GEYJ821	M.RESISTOR CH 1/16W 820	1	
R53445	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R53446	**ERJ3GEYJ101**	**M.RESISTOR CH 1/16W 100**	**1**	
R53447	**ERJ3GEYG102**	**M.RESISTOR CH 1/16W 1K**	**1**	
R53448	**ERJ3GEYJ681**	**M.RESISTOR CH 1/16W 680**	**1**	
R53449	**ERJ3GEYG102**	**M.RESISTOR CH 1/16W 1K**	**1**	
R53450	**ERJ3GEYG102**	**M.RESISTOR CH 1/16W 1K**	**1**	
R53451	**ERJ3GEYJ331**	**M.RESISTOR CH 1/16W 330**	**1**	
R53452	**ERJ3GEYG332**	**M.RESISTOR CH 1/16W 3.3K**	**1**	
R53453	**ERJ3GEYJ392**	**M.RESISTOR CH 1/16W 3.9K**	**1**	
R53454	**ERJ3GEYG102**	**M.RESISTOR CH 1/16W 1K**	**1**	
R53455	**ERJ3GEYG102**	**M.RESISTOR CH 1/16W 1K**	**1**	
R53456	**ERJ3GEY0R00**	**M.RESISTOR CH 1/16W 0**	**1**	
R53457	**ERJ3GEY0R00**	**M.RESISTOR CH 1/16W 0**	**1**	
R53462	**ERJ3GEYG753**	**M.RESISTOR CH 1/16W 75K**	**1**	
R53463	**ERJ3GEYJ684**	**M.RESISTOR CH 1/16W 680K**	**1**	
R53464	**ERJ3GEYJ103**	**M.RESISTOR CH 1/16W 10K**	**1**	
R53465	**ERJ3GEYJ683**	**M.RESISTOR CH 1/16W 68K**	**1**	
R53466	**ERJ3GEYJ331**	**M.RESISTOR CH 1/16W 330**	**1**	
R53467	**ERJ3GEYG473**	**M.RESISTOR CH 1/16W 47K**	**1**	
R53468	**ERJ3GEYJ104**	**M.RESISTOR CH 1/16W 100K**	**1**	
R53469	**ERJ3GEYJ473**	**M.RESISTOR CH 1/16W 47K**	**1**	
R53470	**ERJ3GEYG472**	**M.RESISTOR CH 1/16W 4.7K**	**1**	
R53601	**ERJ3GEYJ182**	**M.RESISTOR CH 1/16W 1.8K**	**1**	
R53602	**ERJ3GEY0R00**	**M.RESISTOR CH 1/16W 0**	**1**	
R53603	**ERJ3GEYG102**	**M.RESISTOR CH 1/16W 1K**	**1**	
R53604	**ERJ3GEYG102**	**M.RESISTOR CH 1/16W 1K**	**1**	
R53605	**ERJ3GEYG102**	**M.RESISTOR CH 1/16W 1K**	**1**	
R53606	**ERJ3GEYG273**	**M.RESISTOR CH 1/16W 27K**	**1**	
R53607	**ERJ3GEYG102**	**M.RESISTOR CH 1/16W 1K**	**1**	
R53608	**ERJ3GEYJ821**	**M.RESISTOR CH 1/16W 820**	**1**	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R53609	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R53610	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R53612	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R53613	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R53614	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R53615	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R53616	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R53617	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R53618	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R53619	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R53620	ERJ3GEYJ151	M.RESISTOR CH 1/16W 150	1	
R53621	ERJ3GEYG471	M.RESISTOR CH 1/16W 470	1	
R53622	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R53623	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R53624	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R53625	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R53626	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R53627	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R53628	ERJ3GEYJ823	M.RESISTOR CH 1/16W 82K	1	
R53629	ERJ3GEYJ333	M.RESISTOR CH 1/16W 33K	1	
R53630	ERJ3GEYJ823	M.RESISTOR CH 1/16W 82K	1	
R53631	ERJ3GEYJ333	M.RESISTOR CH 1/16W 33K	1	
VC53401	ECRJA020E11	TRIMMER 2P	1	
VR53401	EVM7JGA00B13	V.RESISTOR 1K	1	
VR53402	EVM7JGA00B13	V.RESISTOR 1K	1	
VR53403	EVM7JGA00B53	V.RESISTOR 5K	1	
X53401	VSX0386	CRYSTAL OSCILLATOR	1	
.	VWJ20XW215BB	20-PIN FLAT CARD CABLE	1	P53002 - P59008
C51001	ECQU2A104MVA	P.CAPACITOR 250V 0.1U	1	
C51002	ECQU2A104MVA	P.CAPACITOR 250V 0.1U	1	
C51005	ECEC2GG121HZ	E.CAPACITOR 400V 120U	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C51006	ECEA1VGE101	E.CAPACITOR 35V 100U	1	
C51007	ECKF1H331KB	C.CAPACITOR 50V 330P	1	
C51008	ECQV1H334JM	P.CAPACITOR 50V 0.33U	1	
C51009	ECEA1HGE2R2	E.CAPACITOR 50V 2.2U	1	
C51010	ECKF1H222KB	C.CAPACITOR 50V 2200P	1	
C51011	EEUFA1V102	E.CAPACITOR 35V 1000U	1	
C51012	ECFF1H104ZF5	C.CAPACITOR 50V 0.1U	1	
C51014	ECEA1VGE101	E.CAPACITOR 35V 100U	1	
C51015	ECKD2H222KB	C.CAPACITOR 500V 2200P	1	
C51016	ECKD2H222KB	C.CAPACITOR 500V 2200P	1	
C51017	EEUFA1E561	E.CAPACITOR 25V 560U	1	
C51018	ECEA1CGE101	E.CAPACITOR 16V 100U	1	
C51019	ECEA1CGE471	E.CAPACITOR 16V 470U	1	
C51020	ECKD2H222KB	C.CAPACITOR 500V 2200P	1	
C51021	ECKD2H102KB	C.CAPACITOR 500V 1000P	1	
C51022	EEUFA1A152	E.CAPACITOR 10V 1500U	1	
C51023	ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C51024	ECEA1AGE101	E.CAPACITOR 10V 100U	1	
C51025	ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
C51026	ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C51027	ECEA1AGE101	E.CAPACITOR 10V 100U	1	
C51028	ECEA1EGE100	E.CAPACITOR 25V 10U	1	
C51029	ECKDNA222ME	C.CAPACITOR 2200P	1	
C51030	ECKDNA102ME	C.CAPACITOR 1000P	1	
D51001	D3SBA60	DIODE	1	
D51002	P6KE250A	DIODE	1	
D51003	EG01C	DIODE	1	
D51004	AG01V2	DIODE	1	
D51005	MA4220-M	DIODE	1	
D51006	AG01V2	DIODE	1	
D51007	F10P20FR	DIODE	1	
D51008	F5KF20	DIODE	1	
D51009	1SS254	DIODE	1	
D51010	MA4056-M	DIODE	1	
D51011	MA4120H	DIODE	1	
D51012	1SS254	DIODE	1	
D51013	1SS254	DIODE	1	
D51014	1SS254	DIODE	1	
D51015	1SS254	DIODE	1	
D51016	1SS254	DIODE	1	
D51017	MA4056-M	DIODE	1	
D51018	1SS254	DIODE	1	
D51019	AG01V2	DIODE	1	
F51001	VSF0231C25	FUSE	1	
IC51001	FA5311BP	IC	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
IC51002	PQ05RD11	IC	1	
JA1	VEE0B29	WIRE CABLE	1	
JA2	VEE0B29	WIRE CABLE	1	
JA3	VEE0C57	WIRE CABLE	1	
L51001	ELF15N005A	LINE FILTER	1	
L51002	ELF15N005A	LINE FILTER	1	
LB51001	VLP0083	COIL	1	
LB51002	VLP0083	COIL	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
P51001	VJS2178	CONNECTOR (FEMALE) 7P	1	
P51004	VJS3306	AC INLET	1	
PC51002	PC123FY2	PHOTO COUPLER	1	
PJ51002	VWJ08F1140QV	8-PIN FLAT CARD CABLE	1	PJ51002 - P59001
PJ51003	VWJ04D5250QV	4-PIN FLAT CARD CABLE	1	PJ51003 - P52001
PJ51005	VWJ03F1080QV	3-PIN FLAT CARD CABLE	1	PJ51005 - P53001
PJ91001	VWJ08HW180BB	8-PIN FLAT CARD CABLE	1	
Q51001	2SK2671	TRANSISTOR	1	
Q51002	2SC1815GR	TRANSISTOR	1	
Q51003	2SC1815GR	TRANSISTOR	1	
Q51004	2SD2375	TRANSISTOR	1	
Q51005	2SK1387M	TRANSISTOR	1	
Q51006	2SC1815GR	TRANSISTOR	1	
QR51001	UN4211	TRANSISTOR-RESISTOR	1	
R51002	ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R51003	ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R51004	ERDS2TJ150	C.RESISTOR 1/4W 15	1	
R51005	ERX2SJR39	M.RESISTOR 2W 0.39	1	
R51006	ERDS2TJ101	C.RESISTOR 1/4W 100	1	
R51007	ERDS2TJ560	C.RESISTOR 1/4W 56	1	
R51008	ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R51009	ERDS2TJ822	C.RESISTOR 1/4W 8.2K	1	
R51010	ERDS2TJ122	C.RESISTOR 1/4W 1.2K	1	
R51011	ERDS2TJ121	C.RESISTOR 1/4W 120	1	
R51012	ERDS2TJ101	C.RESISTOR 1/4W 100	1	
R51013	ERDS2TJ332	C.RESISTOR 1/4W 3.3K	1	
R51015	ERDS2TJ331	C.RESISTOR 1/4W 330	1	
R51016	ERDS2TJ472	C.RESISTOR 1/4W 4.7K	1	
R51017	ERDS2TJ221	C.RESISTOR 1/4W 220	1	
R51018	ERDS2TJ302	C.RESISTOR 1/4W 3K	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R51019	ERDS2TJ122	C.RESISTOR 1/4W 1.2K	1	
R51020	ERDS2TJ221	C.RESISTOR 1/4W 220	1	
R51025	ERG1SJ220	M.RESISTOR 1W 22	1	
R51026	ERX1SJ4R7	M.RESISTOR 1W 4.7	1	
R51027	ERDS2TJ152	C.RESISTOR 1/4W 1.5K	1	
R51028	ERG1SJ220	M.RESISTOR 1W 22	1	
R51029	ERDS2TJ392	C.RESISTOR 1/4W 3.9K	1	
R51030	ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R51031	ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R51032	ERDS2TJ474	C.RESISTOR 1/4W 470K	1	
R51033	ERDS2TJ472	C.RESISTOR 1/4W 4.7K	1	
R51034	ERG2SJ221	M.RESISTOR 2W 220	1	
R51035	ERDS1FJ474	C.RESISTOR 1/2W 470K	1	
S51001	VSP1085	POWER SWITCH	1	
T51001	VLT0920	TRANSFORMER	1	
TH51001	VRT0146L8R0G	THERMISTOR	1	
VR51001	EVMF6SA00B52	V.RESISTOR 500	1	
ZA51001	EYF52BC	FUSE HOLDER	1	
ZA51002	EYF52BC	FUSE HOLDER	1	
ZA51003	VLP0195	FERRITE CORE	1	
ZA51004	VLP0195	FERRITE CORE	1	
ZA51005	VLP0195	FERRITE CORE	1	
ZA51006	VLP0195	FERRITE CORE	1	
ZA51007	VSC4791	HEAT SINK	1	
ZA51008	XYN3+C8	SCREW	1	
ZA51010	XYN3+C8	SCREW	1	
ZA51011	VMP5567	INLET ANGLE	1	
ZA51013	XYN3+C6	SCREW	1	
ZA51014	XYN3+C6	SCREW	1	
ZA51015	XYC3+CJ8	SCREW	1	
ZA51016	XYN3+C8	SCREW	1	
ZA51017	XYC3+CJ8	SCREW	1	
ZA51018	XYC3+CJ8	SCREW	1	
ZA51020	XYN3+C8	SCREW	1	
ZA51022	VWJ1245	HEAD POWER CABLE	1	P51001 - THERMAL HEAD
ZA51026	VSC4737	SHIELD COVER (POWER)	1	
ZA51027	VMA6768	EARTH ANGLE	1	
ZA51028	VMP4446	HEAT SINK PLATE	1	
ZA51029	XYN3+C10	SCREW	1	
ZA51030	VGQ4894	FET SPACER 6	1	
ZB51001	VMZ2713	BARRIER	1	
ZB51002	VMZ1361	CAPACITOR COVER	1	
ZB51003	VMZ1361	CAPACITOR COVER	1	
C56401	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C56402	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C56403	ECA0JM331	E.CAPACITOR 6.3V 330U	1	
FL56401	VLF0524	FILTER	1	
FL56402	VLF0524	FILTER	1	
FL56403	VLF0633	FILTER	1	
FL56404	VLF0633	FILTER	1	
FL56405	VLF0633	FILTER	1	
FL56406	VLF0633	FILTER	1	
FL56407	VLF1317	FILTER	1	
FL56408	VLF0633	FILTER	1	
FL56409	VLF0633	FILTER	1	
FL56410	VLF1317	FILTER	1	
FL56411	VLF1317	FILTER	1	
FL56412	VLF1317	FILTER	1	
FL56413	VLF1317	FILTER	1	
FL56414	VLF0633	FILTER	1	
FL56415	VLF0633	FILTER	1	
FL56416	VLF0633	FILTER	1	
FL56417	VLF0633	FILTER	1	
FL56418	VLF0633	FILTER	1	
FL56419	VLF0633	FILTER	1	
FL56420	VLF0633	FILTER	1	
FL56421	VLF0633	FILTER	1	
FL56422	VLF0633	FILTER	1	
JK56401	VJJ0396	9-PIN SERIAL JACK	1	
JK56402	VJS3945	36-PIN PARALLEL JACK	1	WITH 2 SCREWS
JK56403	VJJ0183	MONITOR JACK	1	
L56401	ELESE101KA	INDUCTOR 100UH	1	
L56402	ELESE101KA	INDUCTOR 100UH	1	
LB56401	VLP0323A421T	CHIP SOLID INDUCTOR	1	
LB56402	VLP0323A421T	CHIP SOLID INDUCTOR	1	
P56401	VJS3623A025W	CONNECTOR (FEMALE) 25P	1	
P56402	VJP3233A002	CONNECTOR (MALE) 2P	1	
R56401	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	1	
R56402	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	1	
R56403	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	1	
R56404	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	1	
R56405	ERJ3GEYJ180	M.RESISTOR CH 1/16W 18	1	
R56406	ERJ3GEYJ180	M.RESISTOR CH 1/16W 18	1	
R56407	ERJ3GEYJ180	M.RESISTOR CH 1/16W 18	1	
R56408	ERJ3GEYJ180	M.RESISTOR CH 1/16W 18	1	

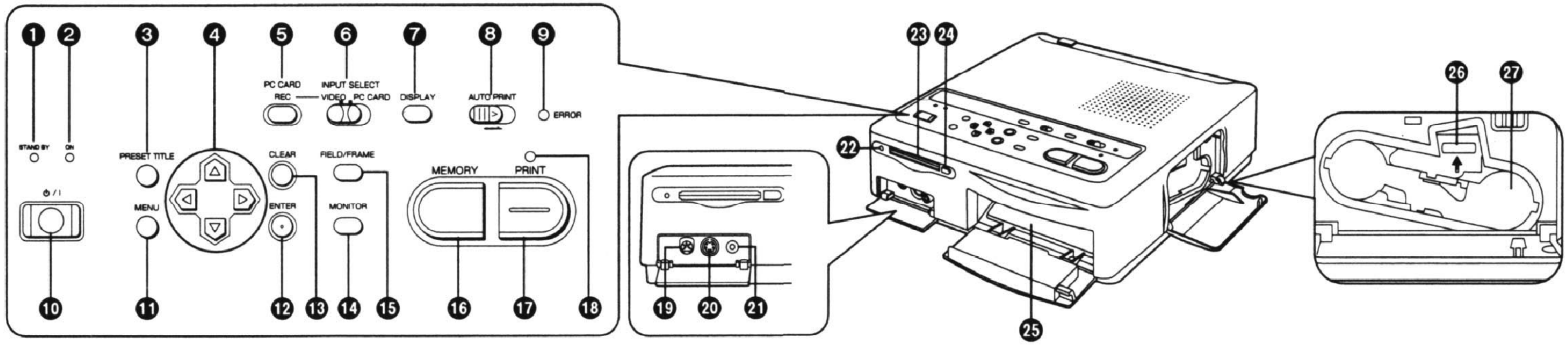
		[illegible]		

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R56409	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	1	
R56410	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	1	
R56451	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	1	
ZA56401	VMP5565	INTERFACE ANGLE	1	
ZA56402	VMA6768	EARTH ANGLE	1	
ZA56403	XTV3+8FFZ	SCREW	1	
C56403	ECA0JM331	E.CAPACITOR 6.3V 330U	1	
JK56403	VJJ0183	MONITOR JACK	1	
LB56401	VLP0323A421T	CHIP SOLID INDUCTOR	1	
LB56402	VLP0323A421T	CHIP SOLID INDUCTOR	1	
P56402	VJP3233A002	CONNECTOR (MALE) 2P	1	
R56451	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	1	
ZA56401	VMP5565	INTERFACE ANGLE	1	
.	VGH4176	JACK PLATE COVER	1	
C52003	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C52004	ECEA1HKA0R1	E.CAPACITOR 50V 0.1U	1	
C52005	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C52006	ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C52007	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C52008	ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C52009	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C52010	ECUX1H102KBV	C.CAPACITOR CH 50V 1000P	1	
C52011	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C52012	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C52013	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
D52001	MA3056-M	DIODE	1	
IC52001	TA7291S	IC	1	
IC52002	TA7291S	IC	1	
IC52003	NJM2904M	IC	1	
IC52004	NJM2903M	IC	1	
P52001	VJS2651B004Z	CONNECTOR (FEMALE) 4P	1	
P52002	VJS2207	CONNECTOR (FEMALE) 11P	1	
P52003	VJP1242T	CONNECTOR (MALE) 2P	1	
P52004	VJP1242T	CONNECTOR (MALE) 2P	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
P52005	VJP1242T	CONNECTOR (MALE) 2P	1	
P52006	VJS2650A003Z	CONNECTOR (FEMALE) 3P	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
52001	MSD602-R	TRANSISTOR	1	
QR52001	MUN2213	TRANSISTOR-RESISTOR	1	
QR52002	MUN2111	TRANSISTOR-RESISTOR	1	
R52001	ERJ3GEYJ153	M.RESISTOR CH 1/16W 15K	1	
R52002	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R52003	ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	1	
R52004	ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	1	
R52006	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1	
R52007	ERJ3GEYJ393	M.RESISTOR CH 1/16W 39K	1	
R52008	ERJ3GEYJ333	M.RESISTOR CH 1/16W 33K	1	
R52009	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R52010	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R52011	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R52013	ERJ3GEYJ181	M.RESISTOR CH 1/16W 180	1	
R52014	ERJ3GEYJ181	M.RESISTOR CH 1/16W 180	1	
R52015	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R52016	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R52017	ERDS2TYJ220	C.RESISTOR 1/4W 22	1	
R52018	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R52019	ERJ3GEYJ333	M.RESISTOR CH 1/16W 33K	1	
R52020	ERJ3GEYJ183	M.RESISTOR CH 1/16W 18K	1	
R52024	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R52025	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
S52001	VSP1027	SWITCH	1	
S52002	VSP1052	SWITCH	1	
SN52001	GP1S94J	PHOTO REFRACTOR	1	
VR52001	EVMEASA00B24	V.RESISTOR 20K	1	
C52701	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
D52701	LN68.VT	LED	1	
D52702	MA151K	DIODE	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
P52701	VJS3537B008G	CONNECTOR (FEMALE) 8P	1	
P52702	VJS2651B003Z	CONNECTOR (FEMALE) 3P	1	
P52703	VJS2651B003Z	CONNECTOR (FEMALE) 3P	1	
PJ52701	VWJ02D5040NN	INK CASSETTE FLAT CABLE	1	
R52701	ERJ3GEYJ181	M.RESISTOR CH 1/16W 180	1	
R52702	ERJ3GEYJ181	M.RESISTOR CH 1/16W 180	1	
R52703	ERJ3GEYJ181	M.RESISTOR CH 1/16W 180	1	
R52707	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	1	
R52709	ERJ3GEYJ181	M.RESISTOR CH 1/16W 180	1	
R52710	ERJ3GEYJ224	M.RESISTOR CH 1/16W 220K	1	
R52711	ERJ6GEYF393	M.RESISTOR CH 1/10W 39K	1	
S52401	VSP1052	SWITCH	1	
SN52701	GP2S24BC	PHOTO REFRACTOR	1	
SN52702	GP2S24BC	PHOTO REFRACTOR	1	
SN52703	GP2S24BC	PHOTO REFRACTOR	1	
ZB52701	VMX1652	LED SPACER	1	
.	VSP1052	SWITCH	1	
.	VWJ02D5120NQ	2-PIN FLAT CABLE	1	PJ52301 - P59007
PJ52501	VWJ03D5210NQ	PAPER CHECK SENSOR CABLE	1	- P59006
SN52501	GP2S40K	PHOTO REFLECTOR	1	
PJ52801	VWJ03D5050NQ	3-PIN FLAT CARD CABLE	1	- P52703
SN52801	GP2S40K	PHOTO REFLECTOR	1	
PJ52601	VWJ03D5120NQ	FG SENSOR CABLE	1	- P52006
SN52601	GP1S94J	PHOTO REFRACTOR	1	



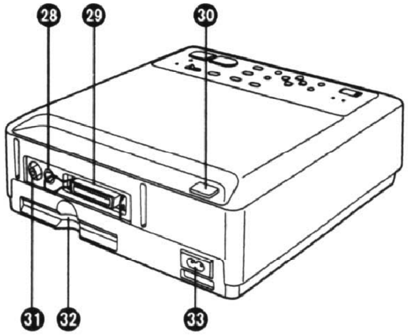
Controls and Components

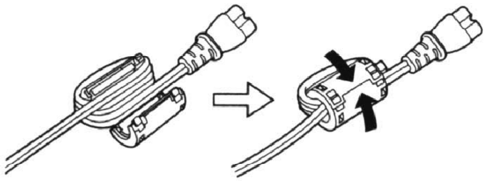
■ Front

❶ **STAND BY Lamp** (→ 28, 56)
❷ **ON Lamp** (→ 24, 54)
❸ **PRESET TITLE Button** (→ 76)
❹ **◀ ▶ ▲ ▼ Button** (→ 30, 54)
❺ **PC CARD REC Button** (→ 74)
❻ **INPUT SELECT (VIDEO/PC CARD) Switch** (→ 24, 54)
❼ **DISPLAY Button** (→ 54)
❽ **AUTO PRINT Lever** (→ 58)
❾ **ERROR Lamp** (→ 123)
❿ **⏻/I (Power) Button** (→ 24, 54)
⓫ **MENU Button** (→ 30, 60)
⓬ **ENTER Button** (→ 30, 60)
⓭ **CLEAR Button** (→ 24)
⓮ **MONITOR Button** (→ 24)
⓯ **FIELD/FRAME Button** (→ 26)
⓰ **MEMORY Button** (→ 24, 58)
⓱ **PRINT Button** (→ 24, 54)
⓲ **PRINT Lamp** (→ 24, 54)
⓳ **EDIT Socket** (→ 14)
⓴ **S-VIDEO IN Socket** (→ 12)
㉑ **VIDEO IN Socket** (→ 12)
㉒ **ACCESS Lamp** (→ 74)
㉓ **PC Card Slot** (→ 50)
㉔ **PC Card EJECT Button** (→ 52)
㉕ **Paper Cassette Slot** (→ 20)
㉖ **Ink Cassette EJECT Lever** (→ 22)
㉗ **Ink Cassette Slot** (→ 22)

■ Rear

㉘ **SERIAL Socket** (→ 88)
㉙ **PARALLEL Socket** (→ 88)
㉚ **POWER (Main Power) Button** (→ 24, 54)
㉛ **VIDEO OUT Socket** (→ 12)
㉜ **Paper Removal Port** (→ 26)
㉝ **Power Socket** (→ 12)

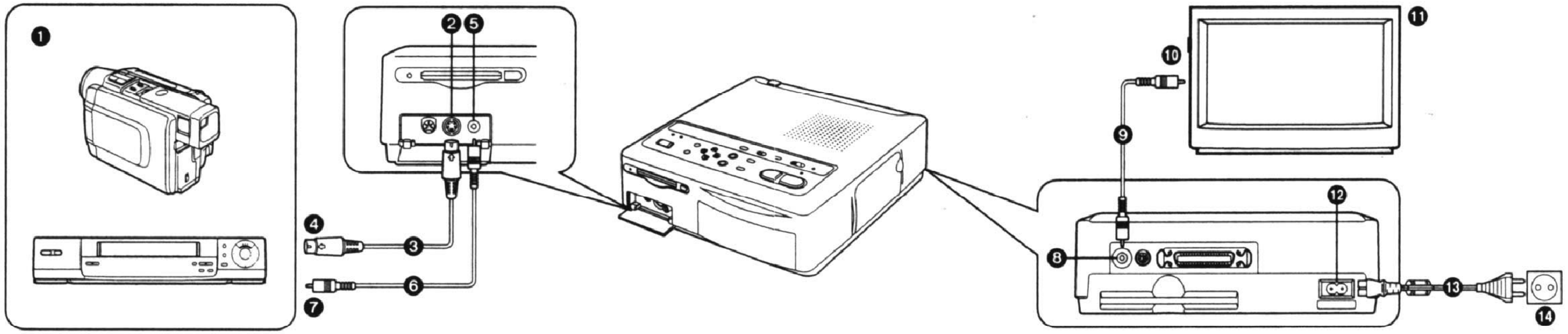




Important Information

In order to prevent electromagnetic interference from the power supply, install the Clamp Filter (supplied) on the Power Cord as shown in the figure above.

- After passing the Power Cord through the Clamp Filter and looping it around once, close the Clamp Filter until it clicks into place.



Connections

(Connecting to the VCR or Camera)

■ **Connect with the S-Video Cord if the VCR or Camera has an S-VIDEO OUT socket.**

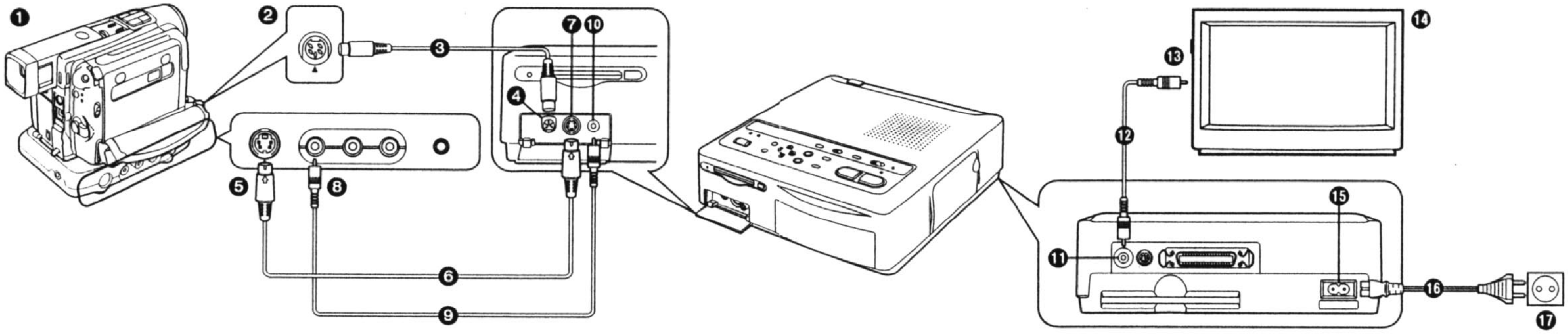
- Connect using a Video Cord if the VCR or Camera has no S-VIDEO OUT socket.
- To listen to sound from the VCR or Video Camera, connect the audio output from the VCR or Video Camera directly to the television AUDIO IN socket.
- If different video sources are connected simultaneously to the S-VIDEO IN Socket and the VIDEO IN Socket, the video for the S-VIDEO IN Socket takes precedence.

❶ Video Camera (sold separately) or other video equipment
❷ S-VIDEO IN Socket
❸ S-Video Cord (sold separately)
❹ To S-VIDEO OUT Socket
❺ VIDEO IN Socket
❻ Video Cord (sold separately)
❼ To VIDEO OUT Socket
❽ VIDEO OUT Socket
❾ Video Cord (supplied)
❿ To VIDEO IN Socket
⓫ Television (sold separately)
⓬ Power Socket
⓭ Power Cord (supplied)
⓮ To AC Power Outlet

Installation Notes:

The temperature inside this printer can become extremely hot due to the thermal sublimation transfer printing system. For this reason, the printer should be used in a well-ventilated location. Also, objects should not be placed on top of the printer.

Be sure to leave at least 10 cm behind the printer so that paper can be removed from the Paper Removal Port if a paper jam occurs.



Automatic Printing

[Automatic printing requires a Digital Video Camera (sold separately) with a System (EDIT) Socket.]

Using a Video Cord (sold separately) or an S-Video Cord (sold separately), connect the Digital Video Camera to the Video Printer. If the System Cord (sold separately) is also used to connect the System (EDIT) Socket on the Digital Video Camera to the EDIT Socket on the Video Printer, you can automatically search for and print still images that were recorded with the digital photo-shot function. (NV-DX1 does not feature)

Procedure

1. Turn on the Video Printer.
2. Turn on the Digital Video Camera.
3. Perform the Auto Print operation through the Digital Video Camera. (For details, refer to the manual provided with the Digital Video Camera.)

(For a suitable Digital Video Camera and how to purchase the cable for Auto-Print, consult your Panasonic Dealer for details.)

❶ Digital Video Camera (sold separately)
❷ System EDIT Socket
❸ System Cord (sold separately)
❹ EDIT Socket
❺ S-VIDEO OUT Socket
❻ S-VIDEO Cord (sold separately)
❼ S-VIDEO IN Socket
❽ VIDEO OUT Socket
❾ VIDEO Cord (sold separately)
❿ VIDEO IN socket
⓫ VIDEO OUT Socket
⓬ Video Cord (supplied)
⓭ To VIDEO IN socket
⓮ Television (sold separately)
⓯ Power Socket
⓰ Power Cord (supplied)
⓱ To AC Power Outlet

- Auto Print may stop if the Video Printer's speed is slowed down due to its cooling mechanisms. In this event, perform the Auto Print operation through the Video Camera again.
- If several photo-shots were recorded consecutively, some prints may be skipped during Auto Print.
- If the ink or paper is replaced while Auto Print is in progress, one image may be inadvertently printed twice.
- The Auto Print function cannot be used to print multiple copies of the same image in succession.
- To stop Auto Print while it is in progress, press the Stop Button on the Digital Video Camera.
  Pressing the CLEAR Button on the Video Printer will not stop Auto Printing.

Paper That Can Be Used for Printing

The Digital Video Printer can use the following four types of paper. (Use Video Print Sets and Video Print Ink Cassettes that either bear the ✉ mark or have been designated by Panasonic as suitable for this Video Printer.)

❶ Standard paper

The Video Print Set VW-MPS50E is required.

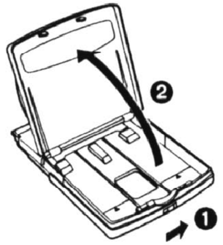
[Sold separately: Ink Cassette and paper (50 sheets)]

- This paper can be used as a postcard if a postage stamp is affixed.
- Do not affix stamps or adhesive paper to the paper or print on it with a word processor before printing. The paper may become curled, or the stamp may come off, resulting in a paper jam or malfunction in the Video Printer.
- Do not write on the paper before printing on it with the Video Printer.
- When writing on a printed surface, use a permanent marker (oil-based). In this case, do not allow printed surfaces to come into contact with each other.
- Permanent markers, washable markers, pencils, and ballpoint pens can all be used to write on the back of the printed images. However, be careful not to apply too much pressure when writing on the back since this will leave marks on the printed surface.

❷ Adhesive paper

- Do not peel off the adhesive before printing. This can cause a paper jam or malfunction in the Video Printer.
- When affixing the adhesive paper to another surface (paper, glass, plastic, metal, etc.), carefully clean the surface of all dirt and foreign matter.
- When cutting off adhesive paper after printing, use a "one-sheet cutter" (available at stores) to cut the adhesive paper with the backing paper still in place.

1



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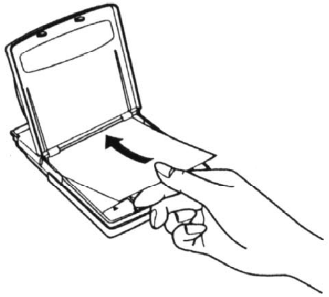

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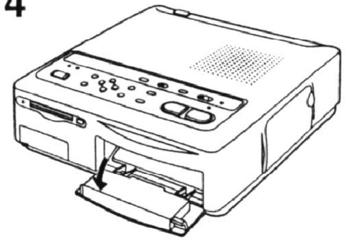

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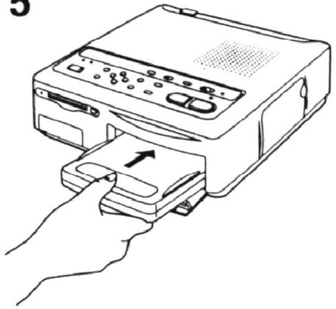


Inserting the Printing Paper

1 **Open the cover of the Paper Cassette (supplied).**
❶ Slide the switch, and
❷ Raise the cover.

2 **Place the paper in the Paper Cassette with the blank side to be printed facing up.**
- The Paper Cassette can hold up to 25 sheets of standard paper.
- Tuck the paper under the two tabs.

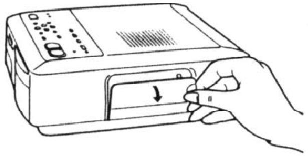
3 **Close the cover.**

4 **Open the cover of the Paper Slot.**
To open, press "PUSH OPEN" at the top right of the cover.

5 **Push the Paper Cassette into the Video Printer as far as it will go.**

- **Do not bend or fold the paper or place it in the cassette with the wrong side facing upward.**
- Do not soil the printing side (blank side) of the paper.
- Fan the paper before placing it in the Paper Cassette.
- The front end of the Paper Cassette Slot becomes the left side of the image to be printed.
- Do not remove the Paper Cassette while printing is in progress.
- After printing, remove the Paper Cassette and close the cover of the Paper Cassette Slot.

1



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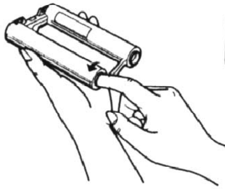

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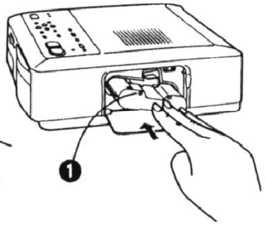

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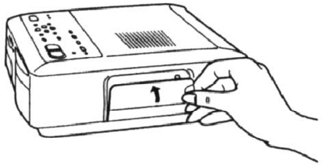
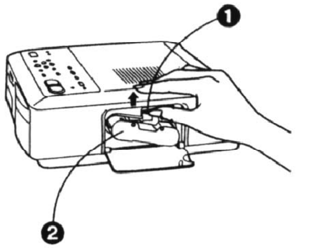




Inserting the Ink Cassette

1 **Open the Ink Cassette Compartment Door.**

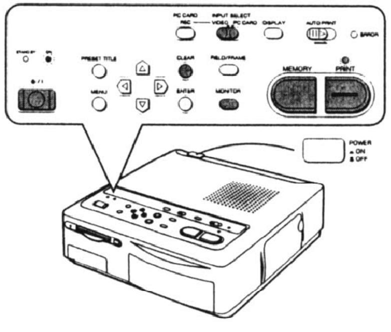
2 **Take up any slack in the Ink Cassette Film.**
- Insert a finger in a spool and turn it in the direction indicated by the arrow.
- Ink Cassettes are included in the Video Print Sets (sold separately). (→ 16)

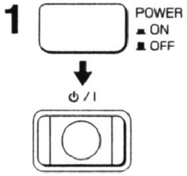
3 **With the recessed part facing upward, push the Ink Cassette into the Video Printer as far as it will go.**
❶ Recessed part

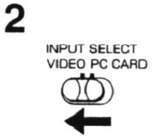
4 **Close the Ink Cassette Compartment Door.**
Check that the Ink Cassette has been inserted all the way before closing the Compartment Door.

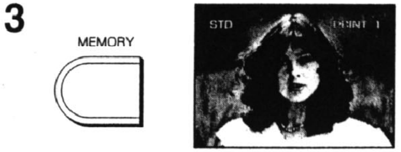
- **Do not touch the ink film in the Ink Cassette, and do not try to pull it out of the cassette.**
- Do not peel off the label on the Ink Cassette.
- The "ink film" refers to the wide tape that is inside the Ink Cassette.
- When all of the ink film in an Ink Cassette has been used up, replace the Ink Cassette with a new one. Used Ink Cassettes cannot be reused.
- For best printing results, use only the printing paper and Ink Cassette packaged together as a Video Print Set.

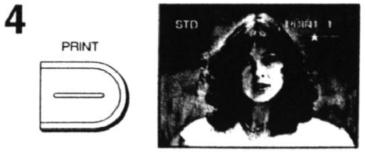
Removing the Ink Cassette
- Push up the Ink Cassette EJECT Lever, and then pull the Ink Cassette straight out.
❶ Ink Cassette EJECT Lever
❷ Ink Cassette


PC CARD
REC
INPUT SELECT
VIDEO
PC CARD
DISPLAY
AUTO PRINT
ERROR
STAND BY
ON
PRESET TITLE
CLEAR
FIELD/FRAME
MEMORY
PRINT
MENU
ENTER
MONITOR
⏻ / I
POWER
ON
OFF


1
POWER
▬ ON
▬ OFF
⏻ / I


2
INPUT SELECT
VIDEO PC CARD


3
MEMORY
STD
PRINT 1


4
PRINT
STD
PRINT 1

Printing from Video Input

(Printing an image from the VIDEO IN or S-VIDEO IN socket)

- Before printing, check that an Ink Cassette has been inserted in the Ink Cassette Compartment.
- Check that paper has been placed in the Paper Cassette, and then start the printing procedure.

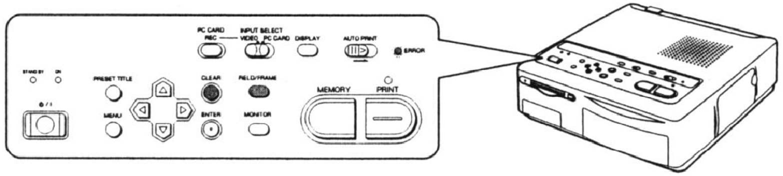
1 Press the ⏻/I (Power) Button to turn the printer on.
The ON Lamp lights up.

2 Set the INPUT SELECT Switch to "VIDEO".

3 While watching the television screen, press the MEMORY Button at the scene that you want to print.
- The PRINT Lamp lights up.
- To store a new scene in memory, press the MONITOR Button so that the PRINT Lamp turns off. Then, press the MEMORY Button again to store a new image in memory.

4 Check that the PRINT Lamp on the Video Printer is lit, and then press the PRINT Button.
- Printing starts.
- During printing, the picture that is being input from the memory appears on the television screen.
- When printing is finished, the picture that is being input from the video source appears on the television screen again.

While printing is in progress, the only button on the Video Printer that functions is the CLEAR Button for cancelling the printing of multiple sheets.


PC CARD
REC
INPUT SELECT
VIDEO
PC CARD
DISPLAY
AUTO PRINT
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STAND BY
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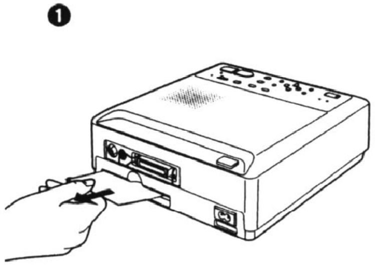
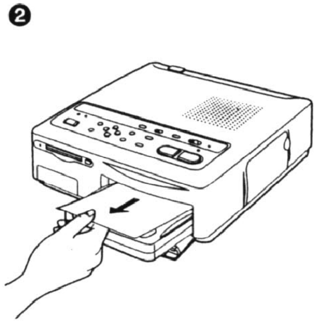
PRESET TITLE
CLEAR
FIELD/FRAME
MEMORY
PRINT
⏻ / I
MENU
ENTER
MONITOR





Blur Reduction

Use this button when the picture stored in memory is blurred because the subject is moving. "FIELD" appears on the screen when the FIELD/FRAME Button is pressed.
- The television may make the picture stored in memory appear slightly blurry. However, this does not affect the printing.

Printing Multiple Copies of the Same Image

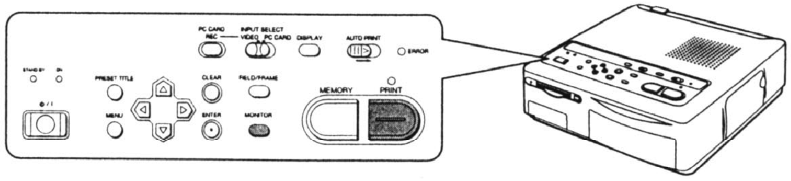
Set the number of prints on the MENU Screen (up to 10 sheets). **(→ 32)**
- The remaining sheets to be printed are shown at the top right of the television screen. This number includes the sheet being printed.
- To cancel continuous printing when two or more sheets remain, press the CLEAR Button.

If a Paper Jam Occurs

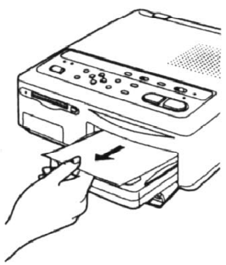
A **"REMOVE JAMMED PAPER"** error message is displayed, and the ERROR Lamp flashes. When this happens, remove the paper where it has jammed (❶ or ❷ in the figure above).
If the paper cannot be removed, turn off the printer. Then, turn the printer on again and remove the paper from either ❶ or ❷.

❶ Rear Paper Removal Port
❷ Print Exit (above the Paper Cassette)

- If the Paper Cassette is removed while printing is in progress, paper will become jammed in the Print Exit (above the Paper Cassette) and be unable to be pulled out. Insert the Paper Cassette and turn the printer on again to discharge the paper.



1



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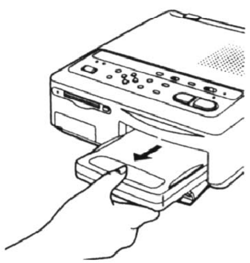

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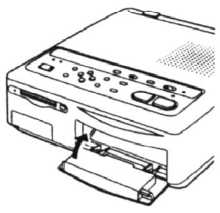


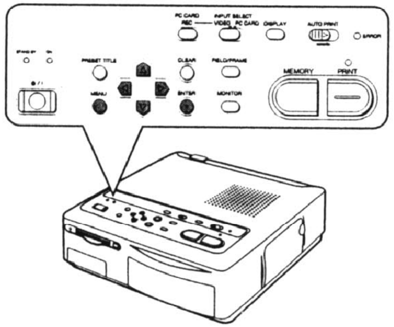
- When printing starts, the "———" display shown at the top right of the screen changes to "☆——".
  "☆——": Printing in progress
  "☆☆—": Printing in progress
  "☆☆☆": Printing is completed when the ☆ mark flashes and then lights up.
  (The ☆ mark indicates the printing progress.)
- **Do not pull the paper while it is moving during the printing operation.**
- **Do not remove the Paper Cassette while printing is in progress.**
- Do not take out the Ink Cassette while printing is in progress.
- If there is no paper in the Paper Cassette or if the paper is not inserted properly, the **"SET PAPER AND PUSH [PRINT]"** message may appear after the PRINT Button is pressed (after approx. 25 seconds). When this happens, reinsert the paper correctly.
- Printing may take more time for continuous printing of two or more sheets or when printing at high or low temperatures. Also, if the Video Printer becomes hot, the edges of the printed images may be slightly discolored.
- Please note that if the paper is bent or folded, the prints may fall from the Print Exit (above the Paper Cassette).
- To prevent paper jams, do not allow more than 10 sheets of paper to accumulate at the Print Exit.

To Print the Same Image Again

After printing is finished, press the MONITOR Button again so that the image displayed on the television screen is stored in the memory. Then, press the PRINT Button to print the same image again.

After Printing

1. Remove the printed paper.
2. Take out the Paper Cassette.
3. Close the cover of the Paper Cassette slot.
4. Turn the printer off by pressing the ⏻/I (Power) Button.
   - The STAND BY Lamp lights up.



1

2

3

4

Using MENU Mode

The settings for the functions in the Video Printer are made at the MENU Screen.

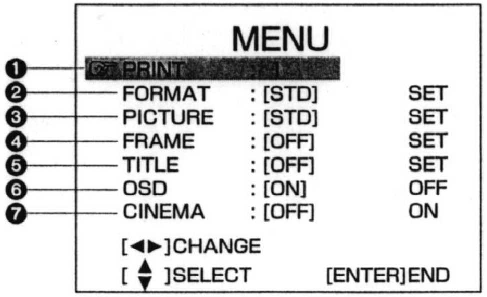
1 **Press the MENU Button.**
The MENU Screen is displayed on the television screen.

2 **Use the ▲ and ▼ Buttons to select the desired menu.**
The ☞ mark indicates the selected item.

3 **Use the ◀ and ▶ Buttons to select the desired setting.**
The selected setting is indicated by brackets [ ].

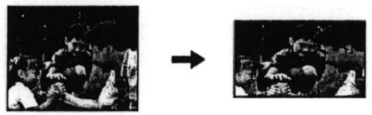
4 **Press the ENTER Button to complete the setting.**
The MENU Screen disappears from the television screen.

- **The ◀ ▲ ▼ ▶ Buttons, ENTER Button, and ⏻/I (Power) Button are the only buttons that function while the MENU Screen is displayed.**
- Once you set "PICTURE," [ADJ] is displayed on the MENU Screen. The previous settings are maintained in memory until you select [SET] to implement the new settings.
- Once you set "FRAME" or "TITLE," [ON] is displayed on the MENU Screen. The previous settings are maintained in memory until you select [SET] to implement the new settings.
- The stored settings are erased when the power cord is unplugged.
- If the letters are blurred and difficult to read when the MENU Screen is displayed, go to the MEMORY Screen and then return to the MENU Screen to make the settings.



```
                MENU
☞PRINT
 FORMAT    : [STD]      SET
 PICTURE   : [STD]      SET
 FRAME     : [OFF]      SET
 TITLE     : [OFF]      SET
 OSD       : [ON]       OFF
 CINEMA    : [OFF]      ON
 [◄►]CHANGE
 [ ▲▼ ]SELECT      [ENTER]END
```

Ⓐ



Ⓑ

Menu Description

❶ **PRINT:**
Use the ◄ and ► Buttons to set the number of prints (from 1 to 10) desired.

❷ **FORMAT:**
If [SET] is selected, use the ▲ and ▼ Buttons to select each print function. **(➔ 38–48)**

❸ **PICTURE:**
If [SET] is selected, you can adjust the picture quality. **(➔ 34)**

❹ **FRAME:**
If [SET] is selected, you can make your own trimming frame. **(➔ 80)**

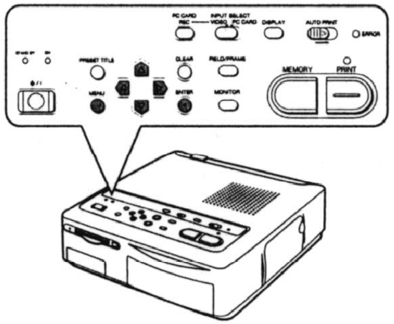
❺ **TITLE:**
If [SET' 'lected, you can make your own titles. (➔

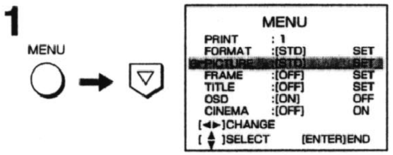
❻ **OSD (On Screen Display):**
Use the ◄ and ► Buttons to select [ON] or [OFF] for the screen display.
- Error messages, menus, and the preset title menu are still displayed even when [OFF] is selected for OSD.
(The setting for OSD is still stored even when the INPUT SELECT Switch is set to "PC CARD").

❼ **CINEMA:**

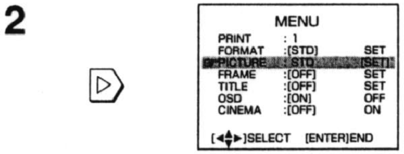
[ON]	All pictures are printed in wide dimensions.
[OFF]	All images, including wide images, are printed in normal dimensions.

- When normal-sized images are printed as wide images, the printed picture is stretched horizontally (Ⓐ).
- When wide images are printed as normal-sized images, the printed picture is stretched vertically (Ⓑ).

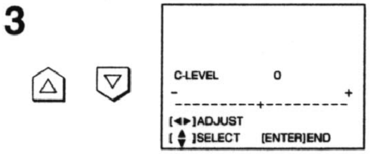




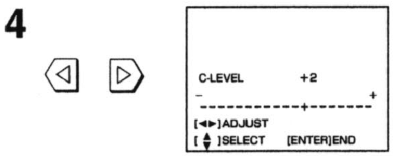
```
           MENU
PRINT     : 1
FORMAT    :[STD]      SET
☞PICTURE  :[STD]      SET
FRAME     :[OFF]      SET
TITLE     :[OFF]      SET
OSD       :[ON]       OFF
CINEMA    :[OFF]      ON
[◄►]CHANGE
[ ▲▼ ]SELECT    [ENTER]END
```



```
           MENU
PRINT     : 1
FORMAT    :[STD]      SET
☞PICTURE  : STD      [SET]
FRAME     :[OFF]      SET
TITLE     :[OFF]      SET
OSD       :[ON]       OFF
CINEMA    :[OFF]      ON

[◄▲▼►]SELECT    [ENTER]END
```



```
C-LEVEL          0
-                          +
---------+----------
[◄►]ADJUST
[ ▲▼ ]SELECT    [ENTER]END
```



```
C-LEVEL          +2
-                          +
-----------+--------
[◄►]ADJUST
[ ▲▼ ]SELECT    [ENTER]END
```

For Optimum Printing Results
(PICTURE)

Although the picture quality of an image that you want to print can be adjusted before storing the image in memory, for optimum results we recommend that you adjust the picture quality of the image after you have stored it in memory.

1 Press the MENU Button and use the ▼ Button to select "PICTURE".

2 Use the ► Button to select [SET].

3 Use the ▲ and ▼ Buttons to select the picture quality item that you want to adjust.
See the adjustment items below.

4 Use the ◄ and ► Buttons to adjust the level.

5 Press the ENTER Button.

Picture Quality Adjustment Items
The adjustments shown below change in the following order.

→C-LEVEL←→C-BALANCE←→BRIGHTNESS←
└SHARPNESS←→CONTRAST←┘

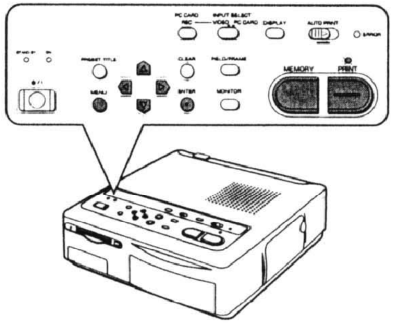
C-LEVEL:	This setting lets you adjust to the desired colour intensity.
C-BALANCE:	This setting lets you reproduce colours with the correct balance.
BRIGHTNESS:	This setting lets dark parts become more visible.
CONTRAST:	This setting lets you adjust the difference between the light and dark parts of the picture.
SHARPNESS:	This setting lets you adjust the contours.

- The C-LEVEL, C-BALANCE, BRIGHTNESS, and CONTRAST settings can be adjusted from −9 to +9 using the ◄ and ► Buttons.
- The level of SHARPNESS can be set to L (Low), M (Medium), or H (High) using the ◄ and ► Buttons.
- For PC Card input, follow the same procedure shown above.
- If it is necessary to re-adjust the picture quality, start over from Step 1.
- The picture will not be displayed in black and white even if C-LEVEL is set to −9.
- Adjusting SHARPNESS has no effect on television picture quality.
- Images are stored in the PC Card without the setting adjustments made to the picture quality.

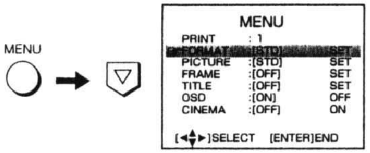
When using video input, one of the most important factors in printing images of high quality is skillful video camera work. When printing, it is recommended that you use an S-VIDEO IN Socket for best results. When shooting a scene from a Video Camera, keep the following points in mind.

- If at all possible, shoot with the light source at your back.
- When shooting a scene outdoors that includes motion, either put the Video Camera into "sports mode" or, if the camera is equipped with an electronic shutter function, set it to about 1/500. Doing so will allow you to print images without blurring.
- When shooting indoors, make sure that there is enough illumination.

Picture Quality Adjustment Procedure
1. Set "PICTURE" to [STD] in MENU mode, and then print an image with contrasting bright and dark areas.
2. In television picture quality adjustment, adjust the television screen to nearly the same colour as the printed picture.
3. At "PICTURE" in MENU mode, adjust the television screen to the desired colour balance. Printing after making these adjustments will produce a print with almost exactly the same colours as the screen.

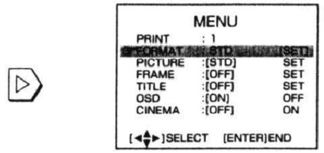


1



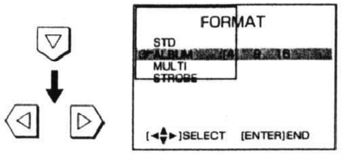
MENU
PRINT : 1
FORMAT :[STD] SET
PICTURE :[STD] SET
FRAME :[OFF] SET
TITLE :[OFF] SET
OSD :[ON] OFF
CINEMA :[OFF] ON
[◄▲▼►]SELECT [ENTER]END

2



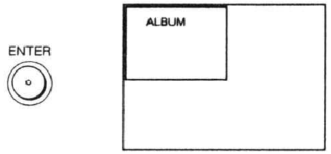
MENU
PRINT : 1
FORMAT : STD [SET]
PICTURE :[STD] SET
FRAME :[OFF] SET
TITLE :[OFF] SET
OSD :[ON] OFF
CINEMA :[OFF] ON
[◄▲▼►]SELECT [ENTER]END

3

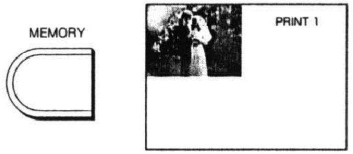


FORMAT
STD
ALBUM [4] 9 16
MULTI
STROBE
[◄▲▼►]SELECT [ENTER]END

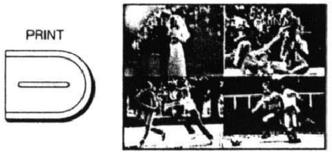
4



5



6



Printing a Series of Different Pictures on the Same Print

(ALBUM)

- This printing function allows you to divide the screen into 4, 9, or 16 mini-frames containing different pictures, and then print them all together on the same print.
- This feature is useful for printing a variety of scenes from a vacation on a single print.

1 **Press the MENU Button, and then use the ▼ Button to select "FORMAT".**

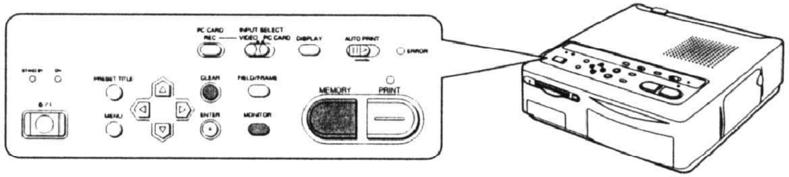
2 **Use the ► Button to select [SET].**

3 **Use the ▼ Button to select "ALBUM", and then use the ◄ and ► Buttons to select the desired number of mini-frames.**

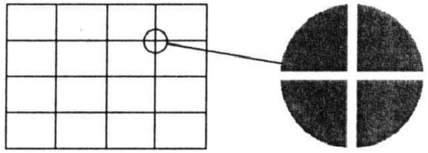
4 **Press the ENTER Button.**

5 **Press the MEMORY Button.**
After the image stored in memory is displayed for about one second, the display returns to the input screen.

6 **Check that the PRINT Lamp is lit up, and then press the PRINT Button.**
- If the entire ALBUM Screen is not stored in memory, press the MONITOR Button to light up the PRINT Lamp.
- Printing starts.



❶



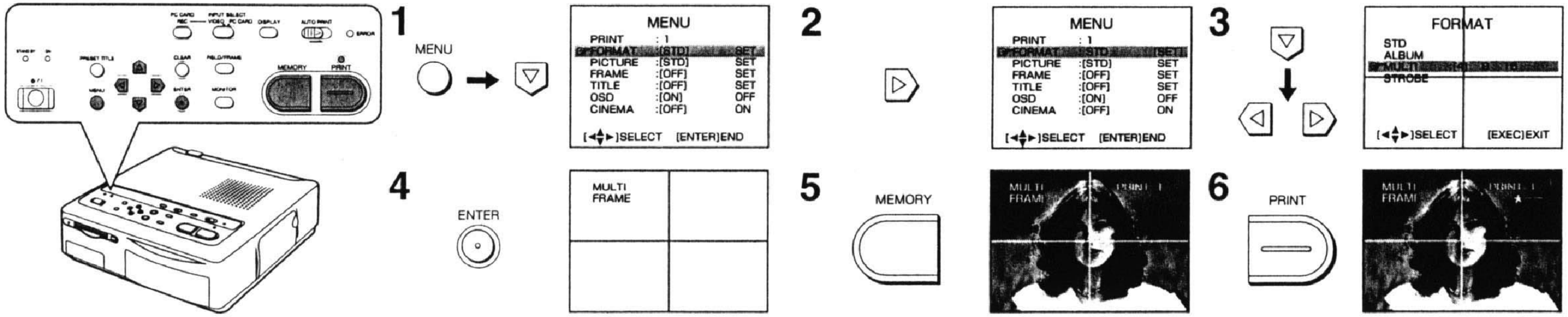
To Erase Stored Pictures
Press the CLEAR Button when the PRINT Lamp is lit. One frame is erased each time the CLEAR Button is pressed.
(To store new pictures to replace the erased pictures, press the MONITOR Button so that the PRINT Lamp turns off, and then press the MEMORY Button.)

Storing Pictures Again after All the Pictures Are Stored
Press the MONITOR Button so that the PRINT Lamp turns off, and then press the MEMORY Button.
(See Step 5 on the previous page.)

To Abort the Setting Process
Press the CLEAR Button twice when the PRINT Lamp is turned off.

- The PRINT Lamp lights up and turns off each time the MONITOR Button is pressed.
- If you press the MONITOR Button again after printing is complete, the display returns to the MEMORY Screen, allowing you to print the same pictures again.
- To allow printing without the entire MULTI Screen stored in memory, press the MONITOR Button to light up the PRINT Lamp. The MULTI Screen will be printed with white spaces where no image was saved. [In this case, the pictures are still stored in memory starting from the upper left corner. There is no editing operation that makes it possible to print images interspersed with blank (white) images.]

Printing for 16 Mini-frame Pictures
16 mini-frame pictures are printed separated by white lines (❶).
(These lines are also displayed on the television screen.)


1
MENU
MEMORY
PRINT
MENU
PRINT :1
FORMAT :[STD] SET
PICTURE :[STD] SET
FRAME :[OFF] SET
TITLE :[OFF] SET
OSD :[ON] OFF
CINEMA :[OFF] ON
[◄▲▼►]SELECT [ENTER]END
2
3
FORMAT
STD
ALBUM
MULTI
STROBE
[◄▲▼►]SELECT [EXEC]EXIT
4
ENTER
MULTI FRAME
5
MEMORY
6
PRINT

Printing the Same Picture Repeatedly on the Same Print

(MULTI FRAME)

- This feature allows you to divide the paper into 4, 9, or 16 mini-frames, and then print the same stored image, reduced in size, in each mini-frame.

1 **Press the MENU Button, and then use the ▼ Button to select "FORMAT".**

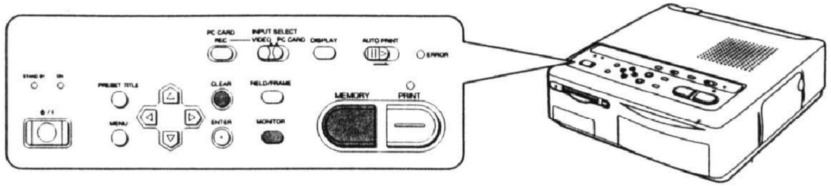
2 **Use the ▶ Button to select [SET].**

3 **Use the ▼ Button to select "MULTI", and then use the ◀ and ▶ Buttons to select the desired number of mini-frames.**

4 **Press the ENTER Button.**

5 **Press the MEMORY Button.**

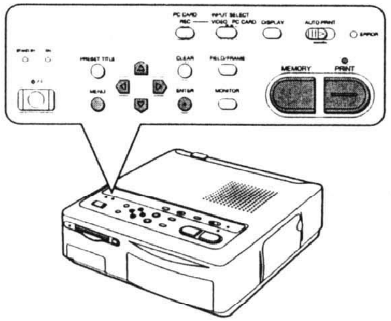
6 **Press the PRINT Button.**
- Printing starts.


PC CARD
REC
INPUT SELECT
VIDEO
PC CARD
DISPLAY
AUTO PRINT
ERROR
PRESET TITLE
CLEAR
FIELD/FRAME
MENU
ENTER
MONITOR
MEMORY
PRINT

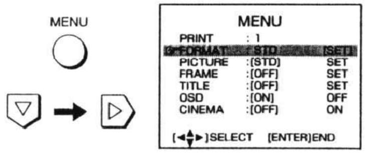
To Erase Stored Pictures
Press the MONITOR Button when the PRINT Lamp is lit. (To store new pictures to replace the erased pictures, press the MONITOR Button so that the PRINT Lamp turns off, and then press the MEMORY Button.)

To Abort the Setting Process
Press the CLEAR Button once when the PRINT Lamp is turned off.

- The PRINT Lamp lights up and turns off each time the MONITOR Button is pressed.
- If you press the MONITOR Button again after printing is complete, the display returns to the MEMORY Screen, allowing you to print the same pictures again.
- It is also possible to store the image that you want to print in memory first, and then select the "MULTI" printing settings on the MENU Screen.

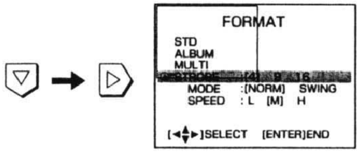


1



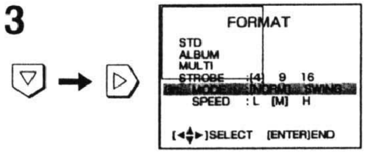
```
MENU
PRINT     : 1
FORMAT    : STD      [SET]
PICTURE   :[STD]      SET
FRAME     :[OFF]      SET
TITLE     :[OFF]      SET
OSD       :[ON]       OFF
CINEMA    :[OFF]      ON

[◄▲▼►]SELECT   [ENTER]END
```

2



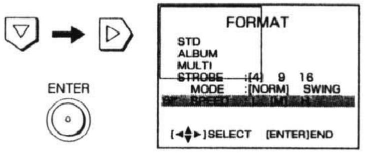
```
FORMAT
STD
ALBUM
MULTI
STROBE     :[4]    9    16
   MODE    :[NORM]  SWING
   SPEED   : L  [M]  H

[◄▲▼►]SELECT   [ENTER]END
```

3



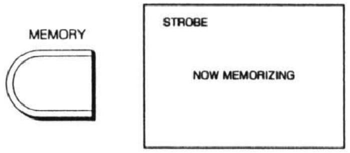
```
FORMAT
STD
ALBUM
MULTI
STROBE     :[4]    9    16
   MODE    :[NORM]  SWING
   SPEED   : L  [M]  H

[◄▲▼►]SELECT   [ENTER]END
```

4



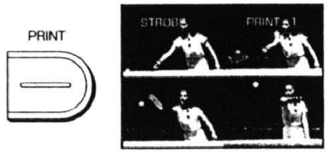
```
FORMAT
STD
ALBUM
MULTI
STROBE     :[4]    9    16
   MODE    :[NORM]  SWING
   SPEED   : L  [M]  H

[◄▲▼►]SELECT   [ENTER]END
```

5



```
STROBE

NOW MEMORIZING
```

6



Printing a Sequence of Pictures on the Same Print

(STROBE)

This feature allows the screen to be divided into 4, 9, or 16 mini-frames, allowing you to print a series of freeze-frames on a single sheet.
This feature is useful when studying, for instance, a golfer's swing or a tennis player's shot.

- One of three strobe speeds can be selected. The memory storage time is determined by the MODE and SPEED settings.

1 **Press the MENU Button, and then use the ▼ Button to select "FORMAT" and use the ▶ Button to select [SET].**

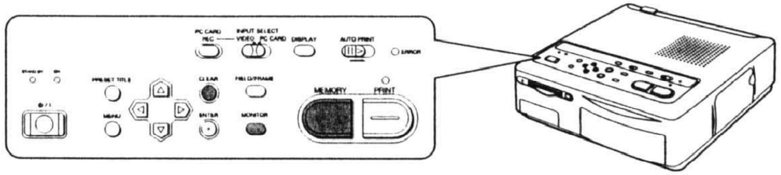
2 **Use the ▼ Button to select "STROBE", and then use the ▶ Button to select the number of mini-frames.**

3 **Use the ▼ Button to select "MODE", and then use the ▶ Button to select the mode.**

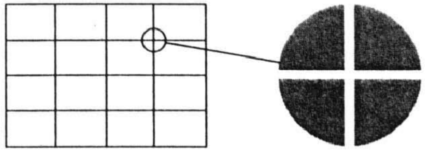
4 **Use the ▼ Button to select "SPEED", and then use the ▶ Button to select the speed. Next, press the ENTER Button.**

5 **Press the MEMORY Button where you want the desired freeze-frames to start.**
The screen goes blank while these frames are being stored in memory.

6 **Press the PRINT Button.**
Printing starts.



❶



To Erase Stored Pictures
Press the CLEAR Button when the PRINT Lamp is lit. One frame is erased each time the CLEAR Button is pressed.
(To store new pictures to replace the erased pictures, press the MONITOR Button so that the PRINT Lamp turns off, and then press the MEMORY Button.)

To Resume Storing Pictures Again
Press the MONITOR Button so that the PRINT Lamp turns off, and then press the MEMORY Button.
(See Step 5 on the previous page.)

To Abort the Setting Process
Press the CLEAR Button twice when the PRINT Lamp is turned off.

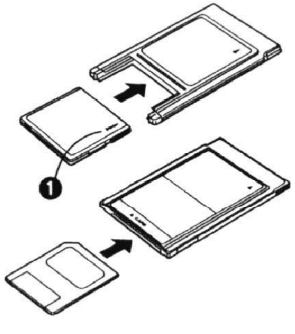
- The PRINT Lamp lights up and turns off each time the MONITOR Button is pressed.
- If you press the MONITOR Button again after printing is complete, the display returns to the MEMORY Screen, allowing you to print the same pictures again.

When to Use the Two Strobe Modes

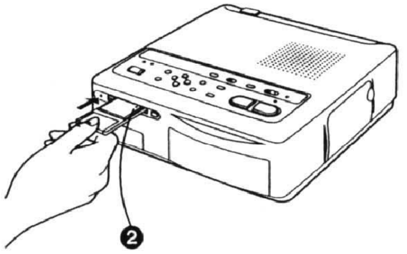
NORM (Normal):	Use this mode to store the screen in memory at uniform intervals.
SWING:	Use this mode to store the screen in memory at long intervals during the first part of the sampling period, then at shorter intervals during the middle part of the sampling period, and then at longer intervals again. This mode is suitable for printing tennis and golf swings.

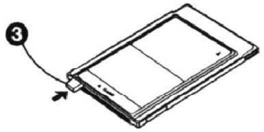
Printing for 16 Mini-frame Pictures
16 mini-frame pictures are printed separated by white lines (❶).
(These lines are also displayed on the television screen.)

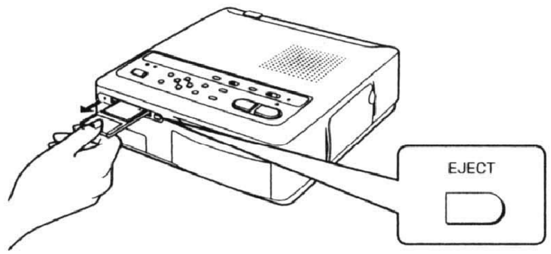
1



2







Inserting a PC Card

- This feature allows you to insert a PC Card, CF Card, or Smart Media into the PC Card Slot, and then print images from the card.
- The PC Card can be inserted into the PC Card Slot without any adaptors. CF Cards and Smart Media require adaptors (available at stores).

1 ■ **Using a CF Card**
Attach the CF Card containing image data to a PC Card Adaptor (available at stores).
❶ Insert the CF Card in the direction of the ▲ mark as shown in the figure.
Insert the CF Card all the way into the PC Card adapter.

■ **Using Smart Media**
Attach the Smart Media containing image data to a PC Card adapter (available at stores).
Follow the adaptor instructions for attaching the Smart Media.

2 **Inserting into PC Card Slot**
❷ Insert the card in the direction of the ▲ mark as shown in the figure.
Insert the card all the way into the PC Card Slot.

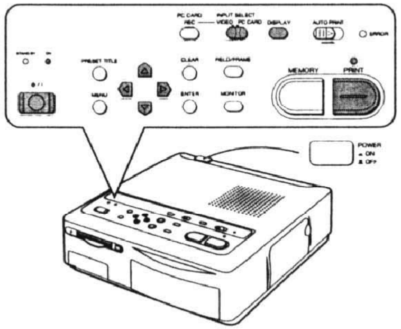
Never pull out or insert the card while the ACCESS Lamp on the front of the Video Printer is lit up. This could damage the format of the card and make it unusable.

- Be careful not to insert the card in the wrong direction.
- PC Card adapters (available at stores) include a CF Card type and Smart Media type. Choose the proper one for the card you are using.
The Smart Media is removed from the adaptor by pressing the button on the adaptor (❸).
- Do not remove the Smart Media while it is still inserted into the PC Card Slot.

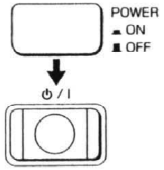
Removing the PC Card
Press the EJECT Button.
- The card comes out.

Compatibility of Cards from Digital Still Cameras with this Digital Video Printer
Cards with recorded images from the following Digital Still Cameras (in no particular order) can be printed with this Digital Video Printer.
(As of February 1998)

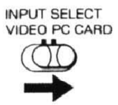
- NV-DCF1, KXL-600A (Panasonic)



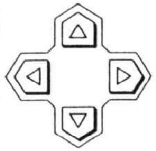
1

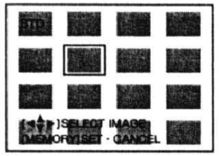


2

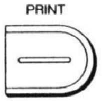


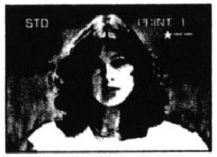
3



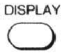


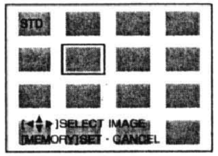
4





5





Printing from a PC Card
(Printing images from a PC Card)

- The images stored in the PC Card are displayed as an Index (16 images per screen). This makes it easy to select the image to be printed.
- Insert the PC Card into the Digital Video Printer before starting the procedure.
- Before printing, check that an Ink Cassette has been inserted into the Ink Cassette Compartment.
- Check that paper has been placed in the Paper Cassette, and then start the printing procedure.

1 **Press the ⏻/I (Power) Button to turn the printer on.**
The ON Lamp lights up.

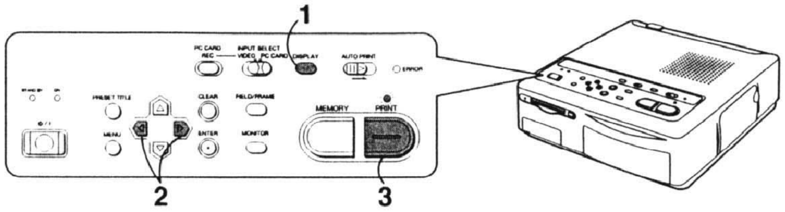
2 **Set the INPUT SELECT Switch to "PC CARD".**
- The ACCESS Lamp lights up, and the data in the card is read.
- The images stored in the card are shown on an Index Display (16 images per screen).

3 **Use the ◄, ►, ▲, and ▼ Buttons to select the image to be printed.**
- The green frame moves each time one of these buttons is pressed.
- When more than 16 images are recorded, you can go to the next Index Display by pressing the ▼ and ► Buttons several times.
- The printer does not function while the images are being displayed.

4 **Press the PRINT Button.**
- The PRINT Lamp blinks when printing starts.
- When printing is finished, a Single-image Display is shown on the screen.

5 **Press the DISPLAY Button to return to the Index.**

None of the buttons on the Video printer function while printing is in progress.

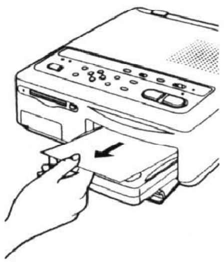


Switching the Television Picture from Index Display to Single-image Display and Printing

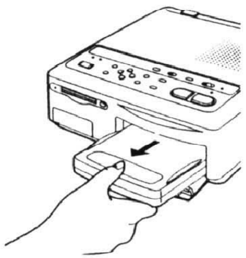
1. Press the DISPLAY Button.
   The DISPLAY Button switches between Single-image Display and Index Display.
2. Use the ◄ and ► Buttons to select the image to be printed.
   The PRINT Lamp lights up.
3. Press the PRINT Button. Printing starts.

- Some images stored in the PC Card may be output to the television screen at a slow rate depending on the image. One image takes about 5 to 30 seconds to be output to the screen. (An Index Display takes about 5 to 30 seconds × 16 images.)
  Also, when the screen switching button is used to change between the Single-image Display and the Index Display, about 5 to 30 seconds are required for each image to be output. The menu operations do not function when the picture image is being output.
- If the image is not displayed properly, remove the card and reinsert it, and then try to display the image again.
- When printing starts, the "———" display shown at the top right of the screen changes to "☆——".
  "☆——": Printing in progress
  "☆☆—": Printing in progress
  "☆☆☆": Printing is completed when the ☆ mark flashes and then lights up.
  (The ☆ mark indicates the printing progress.)
- **Do not pull the paper while it is moving during the printing operation.**
- Do not remove the Paper Cassette while printing is in progress.
- Do not take out the Ink Cassette while printing is in progress.
- To prevent paper jams, do not allow more than 10 sheets of paper to accumulate at the Print Exit.

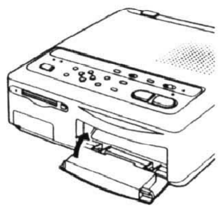
1



2



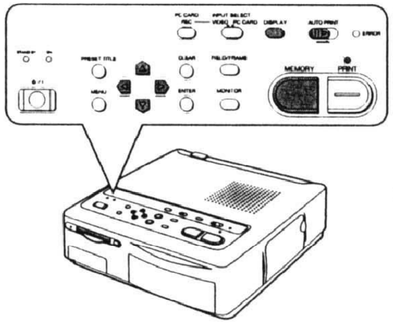
3



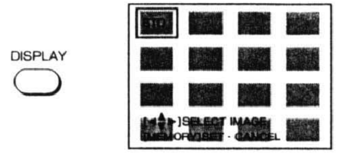
After Printing

1. Remove the printed paper.
2. Take out the Paper Cassette.
3. Close the cover of the Paper Cassette Slot.
4. Turn the printer off by pressing the ⏻/I (Power) Button.

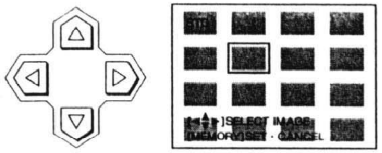
- The STAND BY Lamp lights up.



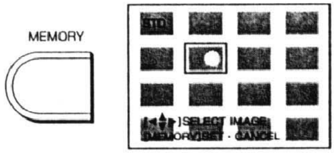
1



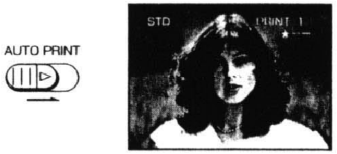
2



3



4



Printing Multiple Images at Once from a PC Card

(Batch print)

This feature allows multiple images selected from the PC Card to be automatically printed.

1 **If a Single-image Display is shown, press the Display Button to display the Index.**

2 **Use the ◄, ►, ▲, and ▼ Buttons to select the image to be printed.**

- When more than 16 images are recorded, you can go to the next Index Display by pressing the ▼ and ► Buttons several times.
- You can return to the previous Index Display by pressing the ▲ and ◄ Buttons several times.

3 **Press the MEMORY Button.**

- The image is marked with a ○ mark.
- Pressing the MEMORY Button again will erase the ○ mark.
- Repeat Steps 2 and 3 to select a number of images.

4 **Slide the AUTO PRINT Lever.**

The PRINT Lamp blinks when printing starts.

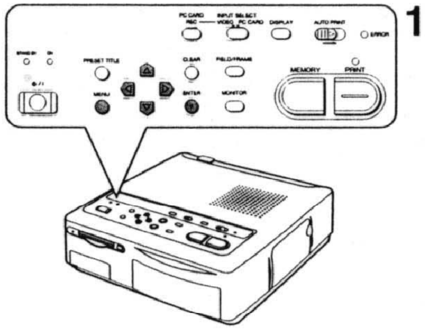
- The images are printed in the order they were selected in Steps 2 and 3.
- When printing is finished, the ○ mark is erased, and the memory is reset.
- After storing the images in memory, setting the INPUT SELECT Switch to "VIDEO" or turning the power off will reset the memory.

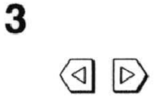
To Print All the Images Recorded in the Card

Slide the AUTO PRINT Lever.
(Steps 1, 2, and 3 are not necessary.)

To Abort Printing

Press the CLEAR Button.
Although the image being printed will not stop, the following printing images will be cancelled.





Using MENU Mode

The settings for the functions in the Video Printer are made at the MENU Screen.

1 **Press the MENU Button.**
The MENU Screen is displayed on the television screen.

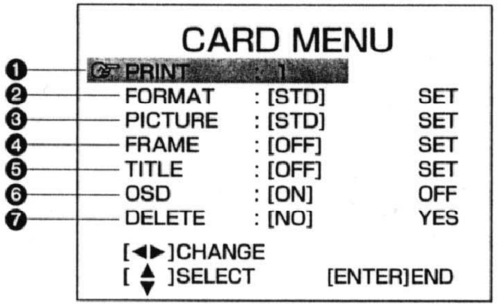
2 **Use the ▲ and ▼ Buttons to select the desired menu.**
The ☞ mark indicates the selected item.

3 **Use the ◀ and ▶ Buttons to select the desired setting.**
The selected setting is indicated by brackets [ ].

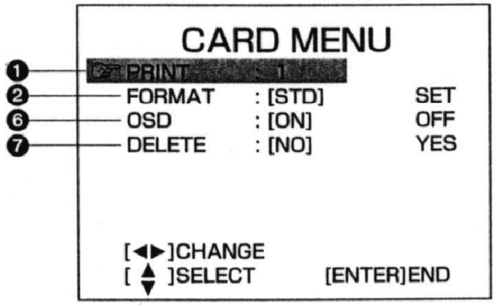
4 **Press the ENTER Button to complete the setting.**
The MENU Screen disappears from the television screen.

- The ◀ ▲ ▼ ▶ Buttons, ENTER Button, and ⏻/I (Power) Button are the only buttons that function while the MENU Screen is displayed.
- The menu operations do not function when the picture image is being output. Operation can be performed once the complete picture appears.

- Once you set "PICTURE," [ADJ] is displayed on the MENU Screen. The previous settings are maintained in memory until you select [SET] to implement the new settings.
- Once you set "FRAME" or "TITLE," [ON] is displayed on the MENU Screen. The previous settings are maintained in memory until you select [SET] to implement the new settings.
- The stored settings are erased when the power cord is unplugged.



CARD MENU
☞ PRINT : 1
FORMAT : [STD] SET
PICTURE : [STD] SET
FRAME : [OFF] SET
TITLE : [OFF] SET
OSD : [ON] OFF
DELETE : [NO] YES
[◀▶]CHANGE
[▲▼]SELECT [ENTER]END



CARD MENU
☞ PRINT : 1
FORMAT : [STD] SET
OSD : [ON] OFF
DELETE : [NO] YES
[◀▶]CHANGE
[▲▼]SELECT [ENTER]END

Menu Description

❶ PRINT:
Use the ◀ and ▶ Buttons to set the number of prints (from 1 to 10) desired.

❷ FORMAT:
If [SET] is selected, use the ▲ and ▼ Buttons to select each print function. **(→ 64–70)**

❸ PICTURE:
If [SET] is selected, you can adjust the picture quality.
- The setting procedure is identical to the procedure for video input. **(→ 34)**

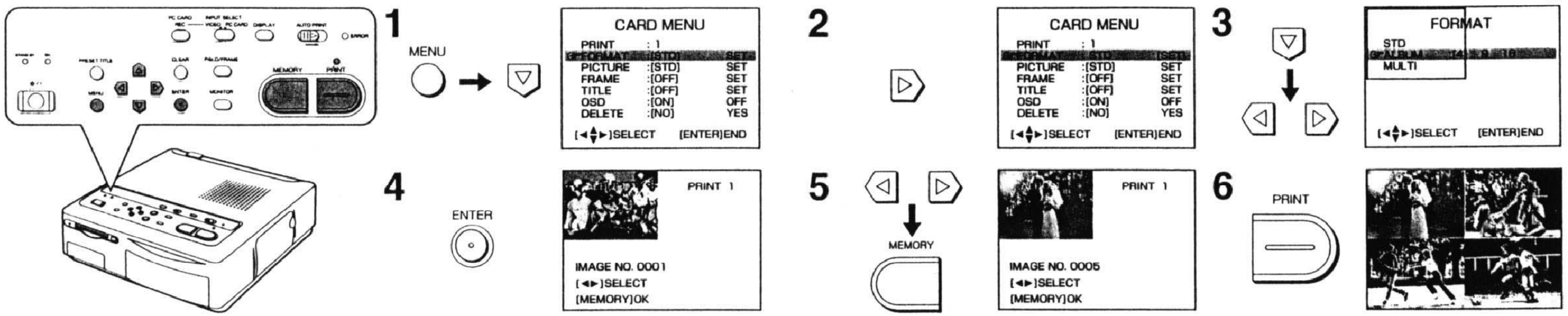
❹ FRAME:
If [SET] is selected, you can make your own trimming frame. **(→ 80)**

❺ TITLE:
If [SET] is selected, you can make your own titles. **(→ 84)**

❻ OSD (On Screen Display):
Use the ◀ and ▶ Buttons to select [ON] or [OFF] for the screen display.
- Error messages, menus, and the preset title menu are still displayed even when [OFF] is selected for OSD.
(The setting for OSD is still stored even when the INPUT SELECT Switch is set to "VIDEO".)

❼ DELETE:
Use the ◀ and ▶ Buttons to select [YES] or [NO] for allowing images in the PC Card to be erased. **(→ 72)**

- During Index Display, only ❶, ❷, ❻, and ❼ are shown. (PICTURE, FRAME, and TITLE are not shown.)


1
MENU
2
3
4
ENTER
5
MEMORY
6
PRINT
PC CARD
INPUT SELECT
DISPLAY
AUTO PRINT
ERROR
MEMORY
PRINT

```
CARD MENU
PRINT    : 1
FORMAT   :[STD]    SET
PICTURE  :[STD]    SET
FRAME    :[OFF]    SET
TITLE    :[OFF]    SET
OSD      :[ON]     OFF
DELETE   :[NO]     YES
[◄▲▼►]SELECT    [ENTER]END
```

```
CARD MENU
PRINT    : 1
FORMAT   : STD    [SET]
PICTURE  :[STD]    SET
FRAME    :[OFF]    SET
TITLE    :[OFF]    SET
OSD      :[ON]     OFF
DELETE   :[NO]     YES
[◄▲▼►]SELECT    [ENTER]END
```

```
FORMAT
STD
ALBUM     :[4]  9  16
MULTI
[◄▲▼►]SELECT    [ENTER]END
```

```
PRINT 1
IMAGE NO. 0001
[◄►]SELECT
[MEMORY]OK
```

```
PRINT 1
IMAGE NO. 0005
[◄►]SELECT
[MEMORY]OK
```

Printing a Series of Different Pictures on the Same Print
(ALBUM)

- This printing function allows you to divide the screen into 4, 9, or 16 mini-frames containing different pictures, and then print them all together on the same print.
- This feature is useful for printing a variety of scenes from a vacation on a single print.

1 **Press the MENU Button, and then use the ▼ Button to select "FORMAT".**

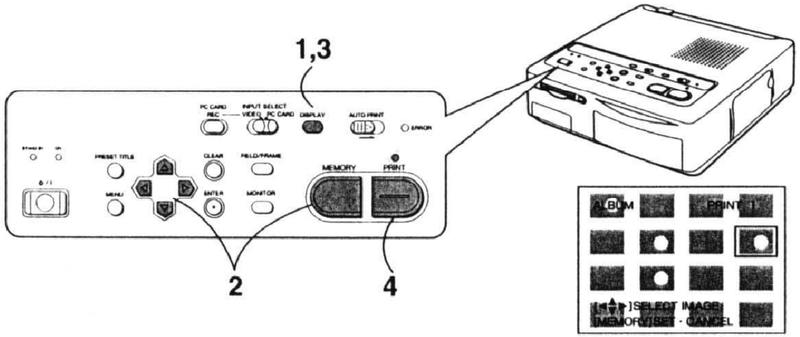
2 **Use the ► Button to select [SET].**

3 **Use the ▼ Button to select "ALBUM", and then use the ◄ and ► Buttons to select the desired number of mini-frames.**

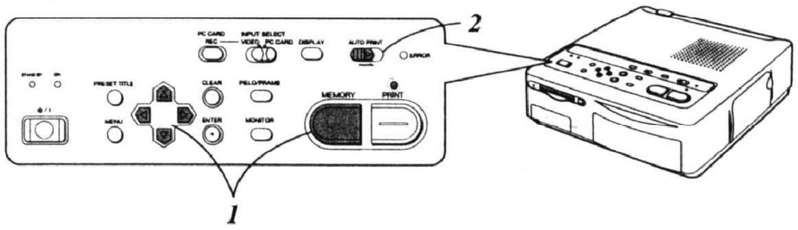
4 **Press the ENTER Button.**

5 **Use the ◄ and ► Buttons to select the desired image to be printed, and then press the MEMORY Button.**
The ALBUM Screen shows white spaces where no image was saved. There is no editing operation that makes it possible to print images interspersed with blank (white) images.

6 **Repeat Step 5, and after storing the number of images which fill up the screen, press the PRINT Button.**
Printing starts.


1,3
2
4
PC CARD
REC
INPUT SELECT
VIDEO
PC CARD
DISPLAY
AUTO PRINT
ERROR
STAND BY
ON
PRESET TITLE
CLEAR
FIELD/FRAME
MENU
ENTER
MONITOR
MEMORY
PRINT

```
ALBUM          PRINT 1
[◄▲▼►]SELECT IMAGE
[MEMORY]SET · CANCEL
```


2
1
PC CARD
REC
INPUT SELECT
VIDEO
PC CARD
DISPLAY
AUTO PRINT
ERROR
STAND BY
ON
PRESET TITLE
CLEAR
FIELD/FRAME
MENU
ENTER
MONITOR
MEMORY
PRINT

To Select the Desired Image Displayed on the Index Display

1. After Step 4 on the previous page, press the DISPLAY Button.
2. Use the ◄, ►, ▲, ▼ Buttons to select desired image to be printed, and then press the MEMORY Button.
   - The image is marked with a ○ mark.
   - This operation can be performed only for the number of images on the screen.
3. Press the DISPLAY Button to confirm the print images.
   (Please be careful when pressing the DISPLAY Button since pressing it twice will clear the memory.)
4. Press the PRINT Button.

To Erase Stored Pictures

Press the CLEAR Button when the PRINT Lamp is lit.

To Abort the Setting Process

Press the CLEAR Button several times to completely clear the memory screen. Pressing the MENU Button when the Index Display is displayed will return you to the CARD MENU.

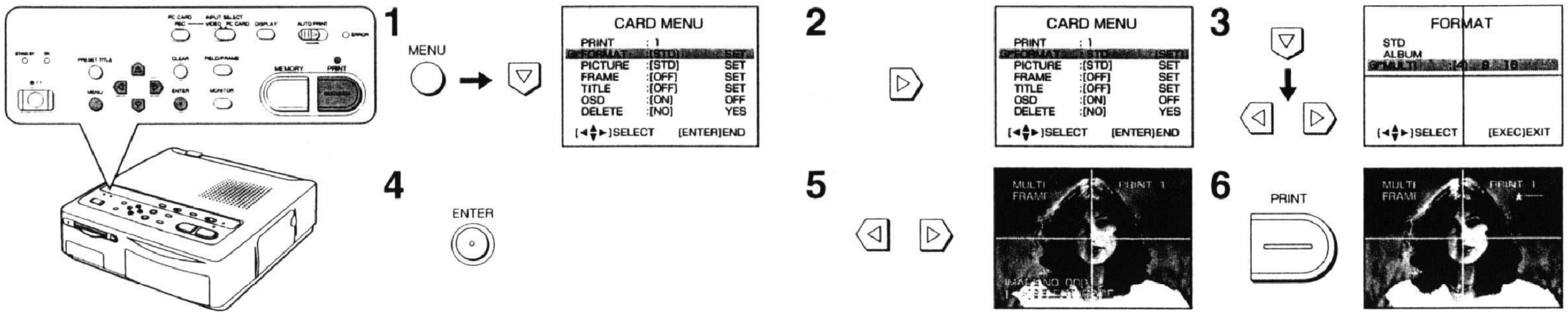
To Print Various ALBUM Prints from Different Screens at the Same Time

1. Use the ◄, ►, ▲, and ▼ Buttons and MEMORY Button to select the various different types of images.
2. Slide the AUTO PRINT Lever.

Example: If **ALBUM:[4]** is selected when printing 8 selected images, then the first print will have the first to the fourth selected images, and the second print will have the fifth to the eighth selected images.

Printing for 16 Mini-frame Pictures

16 mini-frame pictures are printed separated by white lines.
(The horizontal lines are displayed on the television screen, but the vertical lines are not displayed.)



CARD MENU
PRINT : 1
FORMAT :[STD] SET
PICTURE :[STD] SET
FRAME :[OFF] SET
TITLE :[OFF] SET
OSD :[ON] OFF
DELETE :[NO] YES
[◄▲▼►]SELECT [ENTER]END

FORMAT
STD
ALBUM
MULTI [4] 9 16
[◄▲▼►]SELECT [EXEC]EXIT

Printing the Same Picture Repeatedly on the Same Print
(MULTI FRAME)

- This feature allows you to divide the paper into 4, 9, or 16 mini-frames, and then print the same stored image, reduced in size, in each mini-frame.

1 **Press the MENU Button, and then use the ▼ Button to select "FORMAT".**

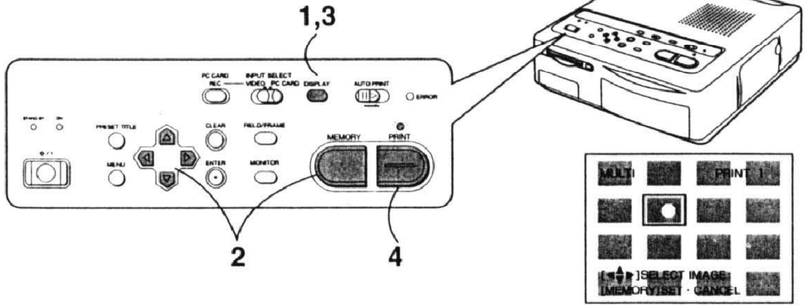
2 **Use the ► Button to select [SET].**

3 **Use the ▼ Button to select "MULTI", and then use the ◄ and ► Buttons to select the desired number of mini-frames.**

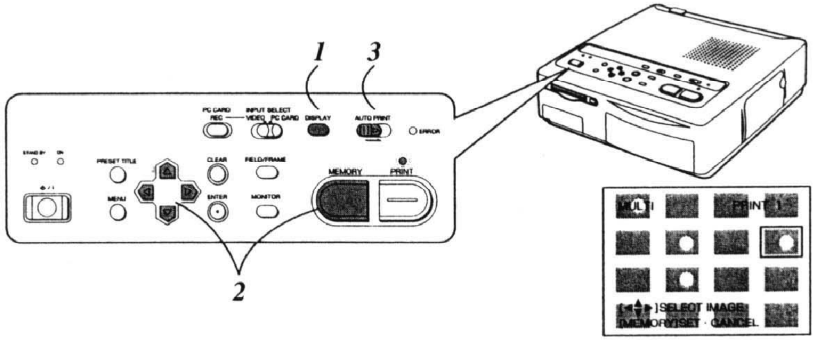
4 **Press the ENTER Button.**

5 **Use the ◄ and ► Buttons to select the desired image to be printed.**

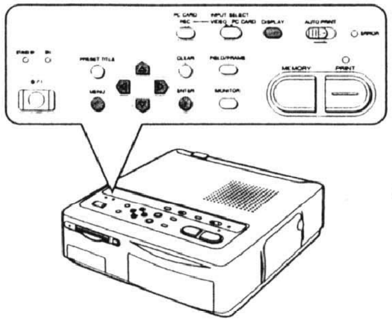
6 **Press the PRINT Button.**
Printing starts.



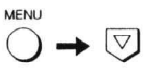
To Select the Desired Image Displayed on the Index Display
1. After Step 4 on the previous page, press the DISPLAY Button.
2. Use the ◄, ►, ▲, ▼ Buttons to select the desired image to be printed, and then press the MEMORY Button.
   - The image is marked with a ○ mark.
   - Pressing the MEMORY Button again will erase the ○ mark.
3. Press the DISPLAY Button to confirm the print images.
4. Press the PRINT Button.

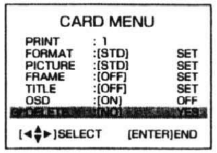


To Print Various Types of Different MULTI FRAME Prints from the Same Screen at the Same Time
1. After Step 4 on the previous page, press the DISPLAY Button so that the Index Display is shown.
2. Use the ◄, ►, ▲, and ▼ Buttons and MEMORY Button to select the various different types of images.
3. Slide the AUTO PRINT Lever.

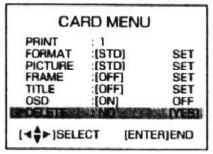


1

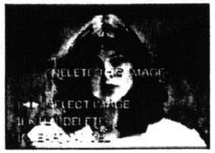



CARD MENU
PRINT : 1
FORMAT :[STD] SET
PICTURE :[STD] SET
FRAME :[OFF] SET
TITLE :[OFF] SET
OSD :[ON] OFF
DELETE :[NO] YES
[◄▲▼►]SELECT [ENTER]END

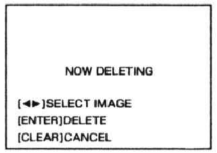
2


CARD MENU
PRINT : 1
FORMAT :[STD] SET
PICTURE :[STD] SET
FRAME :[OFF] SET
TITLE :[OFF] SET
OSD :[ON] OFF
DELETE : NO [YES]
[◄▲▼►]SELECT [ENTER]END

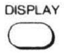
3



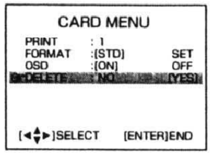
4


NOW DELETING
[◄►]SELECT IMAGE
[ENTER]DELETE
[CLEAR]CANCEL

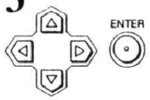
1

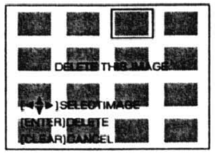


2


CARD MENU
PRINT : 1
FORMAT :[STD] SET
OSD :[ON] OFF
DELETE : NO [YES]
[◄▲▼►]SELECT [ENTER]END

3




DELETE THIS IMAGE
[◄▲▼►]SELECTIMAGE
[ENTER]DELETE
[CLEAR]CANCEL

Erasing the Images on the PC Card

(Erasing card Images)

The images stored on the PC Card can be erased one at a time.

1 **Press the MENU Button, and then use the ▼ Button to select "DELETE".**

2 **Use the ► Button to select [YES].**

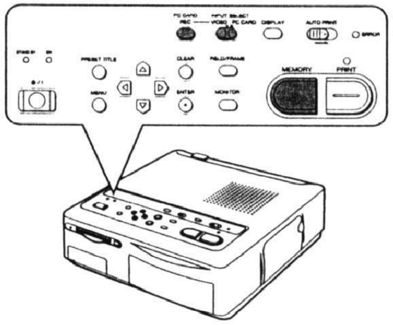
3 **Use the ◄ and ► Buttons to select the desired image to be erased.**

4 **Press the ENTER Button.**
When the image is erased, the screen returns to the CARD MENU. To continue erasing images, repeat Steps 2 and 3.

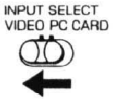
- **Once an image has been erased, it cannot be restored. Check carefully before erasing any images.**
- **Never remove the PC Card or press the ⏻/I (Power) Button to turn off the Video Printer while the image is being erased (when the ACCESS Lamp is lit up). This could damage the format of the card and make it unusable.**
- Images can be erased either from the Single-image Display and Index Display.

To Select the Desired Image to be Erased from the Index Display Screen

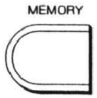
1. Press the DISPLAY Button so that the Index Display is shown.
2. At the MENU Screen, select "DELETE", and then select [YES].
3. Use the ◄, ►, ▲, and ▼ Buttons to select the image to be erased, and then press the ENTER Button.



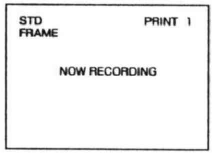
2



3



4


STD PRINT 1
FRAME
NOW RECORDING

Recording the Video Input Image on the PC Card

(Recording Images on the PC Card)

- This function allows images from the VIDEO IN Socket or the S-VIDEO IN Socket to be recorded on the PC Card as still images.
- The images are recorded as still images.
- Approximately 40 images can be recorded on a 4-MB capacity PC Card. However, this may vary depending on the stored image.

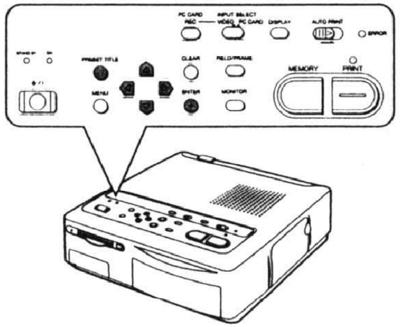
1 **Connect the necessary devices, and then prepare the desired image to be recorded on the PC Card.**
Connections (→ 12)

2 **Set the INPUT SELECT Switch to "VIDEO".**

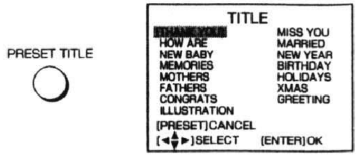
3 **Start playback of the video equipment, and then while viewing the television screen, press the MEMORY Button at the scene to be recorded on the card.**
The scene is stored in the Video Printer memory.

4 **Press the PC CARD REC Button.**
- The scene is stored in the PC Card from the Video Printer memory.
- The ACCESS Lamp lights up while the image is being recorded.

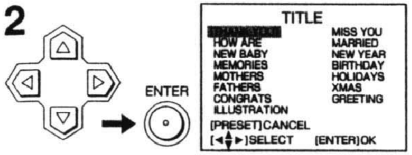
- **Never remove the PC Card or turn off the Video Printer while the image is being recorded (when the ACCESS Lamp is lit up). This could damage the format of the card and make it unusable.**
- Images cannot be recorded on the PC Card with MULTI FRAME Mode.
- Data stored in the PC Card undergoes image compression. In some cases, this can deteriorate the image when it is stored on the card.
- Images are stored in the PC Card without the setting adjustments made to the picture quality.
- Blurred images are stored without any adjustments.
- Titles are not stored.
- Wide images cannot be stored in wide format in the PC Card.


PC CARD
REC
INPUT SELECT
VIDEO
PC CARD
DISPLAY
AUTO PRINT
ERROR
PRESET TITLE
CLEAR
FIELD/FRAME
MEMORY
PRINT
MENU
ENTER
MONITOR

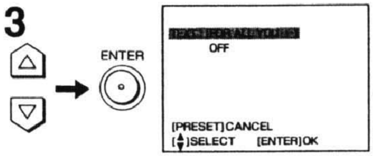
1


PRESET TITLE
TITLE
THANK YOU
HOW ARE
NEW BABY
MEMORIES
MOTHERS
FATHERS
CONGRATS
ILLUSTRATION
MISS YOU
MARRIED
NEW YEAR
BIRTHDAY
HOLIDAYS
XMAS
GREETING
[PRESET]CANCEL
[◀▲▼▶]SELECT [ENTER]OK

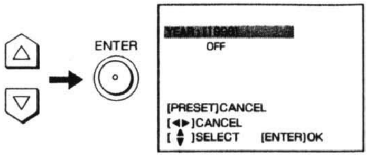
2


ENTER
TITLE
THANK YOU
HOW ARE
NEW BABY
MEMORIES
MOTHERS
FATHERS
CONGRATS
ILLUSTRATION
MISS YOU
MARRIED
NEW YEAR
BIRTHDAY
HOLIDAYS
XMAS
GREETING
[PRESET]CANCEL
[◀▲▼▶]SELECT [ENTER]OK

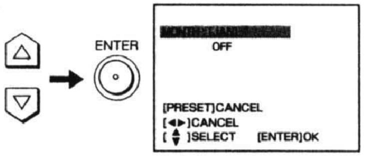
3


ENTER
OFF
[PRESET]CANCEL
[▲▼]SELECT [ENTER]OK

4


ENTER
YEAR: [1998]
OFF
[PRESET]CANCEL
[◀▶]CANCEL
[▲▼]SELECT [ENTER]OK

5


ENTER
OFF
[PRESET]CANCEL
[◀▶]CANCEL
[▲▼]SELECT [ENTER]OK

Printing with Title or Trimming Frame

(Preset title)

This feature uses preset titles to add titles or trimming frames to the image.

- The Video Printer includes 14 examples of preset titles and 8 illustrations. **(See next page.)**
  Some of the greeting examples are coloured.

1 **Press the PRESET TITLE Button.**
If the Index Display Screen is shown when using the PC Card, press the PRESET TITLE Button after switching to Single-image Display.

2 **Use the ◀, ▶, ▲, and ▼ Buttons to make a selection, and then press the ENTER Button.**

3 **Use the ▲ and ▼ Buttons to select the "TEXT", and then press the ENTER Button.**
Text cannot be selected for examples ❷, ❸, ❺, ❻, ❼, ❽, and ❿.

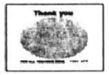
4 **Use the ▲ and ▼ Buttons to select the "YEAR", and then press the ENTER Button.**
You can change to the desired year using the ◀ and ▶ Buttons.

5 **Use the ▲ and ▼ Buttons to select the "MONTH", and then press the ENTER Button.**
You can change to the desired month using the ◀ and ▶ Buttons.

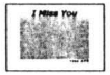
6 **Print the title and image.**

---

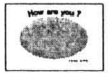
❶



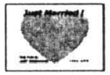
❷



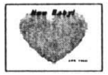
❸



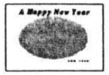
❹


Just Married !

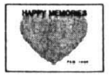
❺



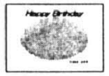
❻


A Happy New Year

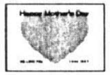
❼


HAPPY MEMORIES

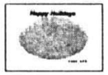
❽


Happy Birthday

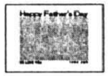
❾


Happy Mother's Day

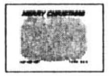
❿


Happy Holidays

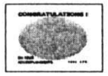
⓫


Happy Father's Day

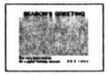
⓬


MERRY CHRISTMAS

⓭

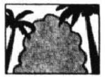

CONGRATULATIONS !

⓮

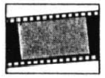

SEASON'S GREETING

⓯

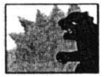
①



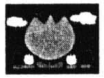
②



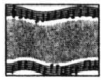
③



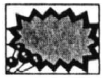
④



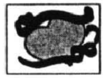
⑤



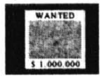
⑥



⑦



⑧


WANTED
$ 1.000.000

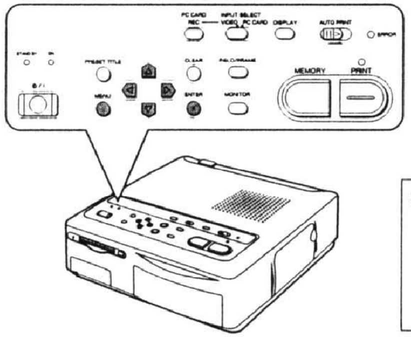
Colours	Example Number
Black	❶, ❸, ⓭
Red	❻, ❼, ❽, ❾, ⓬, ⓮
Cyan, Blue	❿
Pink	❷, ❹
Green	❺, ⓫

⓯ Selecting "ILLUSTRATION" allows you to choose from the eight illustrations ① to ⑧.
Use the ◀ and ▶ Buttons to select one of the illustrations ① to ⑧, and then press the ENTER Button.

- Although a portion of the title display is not shown on the television screen, this has no effect on the printing.
- The year can be set from 1997 to 2028.
- All data stored in the memory is erased when the Video Printer is turned off.
- To turn off a trimming frame or title on the television screen, press the PRESET TITLE Button.
- To turn off either the trimming frame or title only, set "FRAME" or "TITLE" in MENU Mode to [OFF].
  (Switching this setting to [ON] again will display the trimming frame or title again.)

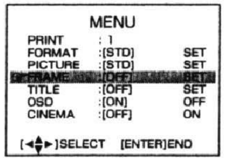
To Abort the Setting Process
Press the PRESET TITLE Button.

- When an illustration ⓯ is inserted into an image from a PC Card, the right and left sides of the illustration will become slightly shortened.



1

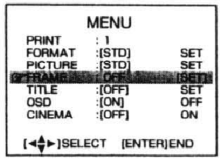
MENU ○ → ▽



```
        MENU
PRINT   : 1
FORMAT  :[STD]     SET
PICTURE :[STD]     SET
☞FRAME  :[OFF]     SET
TITLE   :[OFF]     SET
OSD     :[ON]      OFF
CINEMA  :[OFF]     ON

[◀▲▼▶]SELECT   [ENTER]END
```

2

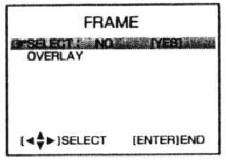
▷



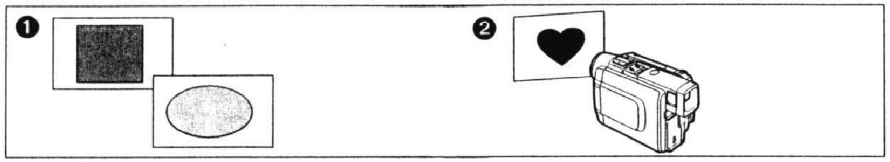
```
        MENU
PRINT   : 1
FORMAT  :[STD]     SET
PICTURE :[STD]     SET
☞FRAME  : OFF      [SET]
TITLE   :[OFF]     SET
OSD     :[ON]      OFF
CINEMA  :[OFF]     ON

[◀▲▼▶]SELECT   [ENTER]END
```

3

▽ → ▷



```
        FRAME
☞SELECT :  NO     [YES]
 OVERLAY



[◀▲▼▶]SELECT      [ENTER]END
```



4

ENTER ◎

Printing with Trimming Frame

A trimming frame can be made in one of two possible ways.

❶ **Selecting from one of the preset trimming patterns: SQUARE, OVAL, FROST, or HEART**
(The size of the SQUARE trimming frame can be adjusted.)
- Trimming can be used to cover black bands appearing at the top, bottom or around the image (such as for movie scenes).

❷ **Capturing with your Video Camera a trimming frame that you created**

1 Press the MENU Button, and then use the ▼ Button to select "FRAME".

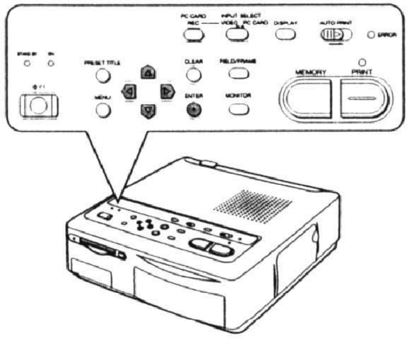
2 Use the ▶ Button to select [SET].

3 Use the ▼ Button to select one of the two methods, and then use the ▶ Button to select [YES].

❶ **When "SELECT" is chosen**
Select one of the four trimming patterns: SQUARE, OVAL, FROST, and HEART. Then, select [YES].
- The size of the SQUARE trimming can be adjusted by using the ◀, ▲, ▼, and ▶ Buttons.

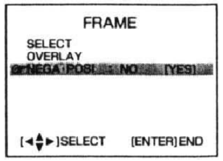
❷ **When "OVERLAY" is chosen**
A trimming frame that you created is captured with your Video Camera, and the trimming frame is adjusted for optimum appearance.
- The value can be adjusted over a range from −9 to +9. Positive values make the trimming frame lighter, and negative values make the trimming frame darker.

4 If "OVERLAY" was selected in Step 3, press the ENTER Button.



5

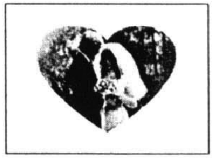
▽ → ▷



```
        FRAME
 SELECT
 OVERLAY
☞NEGA・POSI :  NO    [YES]



[◀▲▼▶]SELECT    [ENTER]END
```

6

ENTER ◎



5 To perform inside-outside reversal, use the ▼ Button to select "NEGA • POSI". Next, use the ▶ Button to select [YES], and then select "NEGA" or "POSI".

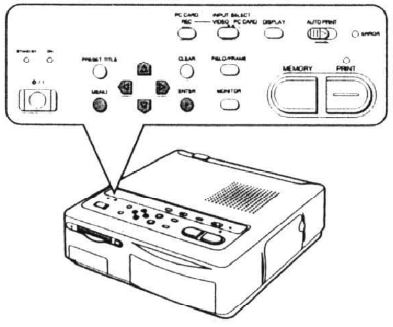
6 Press the ENTER Button.
(If the menu is displayed, hold down this button until the menu disappears.)

7 Print the trimming frame.

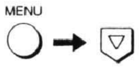
- When a trimming frame is stored in memory, [ON] appears on the MENU Screen.
- A trimming frame stored in memory is lost when the Digital Video Printer is turned off.
- When a new trimming frame is stored in memory, the previous trimming frame is erased.
- When a preset title is used, the previous trimming frame is lost.
- When capturing the title or trimming frame with a Video Camera, shine the lighting at a 45-degree angle to prevent reflection.
- To temporarily turn off a trimming frame stored in memory displayed on the screen, set "FRAME" in MENU Mode to [OFF].
(When the setting is switched back to [ON], the stored trimming frame reappears on the screen.)
- When creating your own frame, use a black marker on white paper.

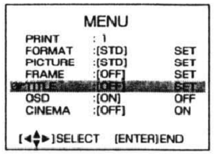
NEGA • POSI Reversal

NEGA:	The image is inserted outside the stored frame.
POSI:	The image is inserted inside the stored frame.


PC CARD
REC
INPUT SELECT
VIDEO
PC CARD
DISPLAY
AUTO PRINT
ERROR
STANDBY
ON
PRESET TITLE
CLEAR
FIELD/FRAME
MEMORY
PRINT
MENU
ENTER
MONITOR

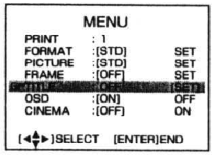
1





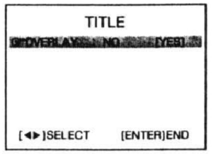
```
MENU
PRINT     : 1
FORMAT    :[STD]     SET
PICTURE   :[STD]     SET
FRAME     :[OFF]     SET
TITLE     :[OFF]     SET
OSD       :[ON]      OFF
CINEMA    :[OFF]     ON

[◀▲▼▶]SELECT   [ENTER]END
```

2



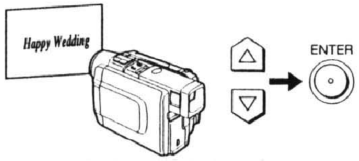
```
MENU
PRINT     : 1
FORMAT    :[STD]     SET
PICTURE   :[STD]     SET
FRAME     :[OFF]     SET
TITLE     : OFF     [SET]
OSD       :[ON]      OFF
CINEMA    :[OFF]     ON

[◀▲▼▶]SELECT   [ENTER]END
```

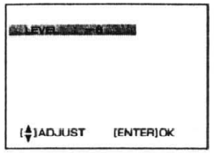
3



```
TITLE
OVERLAY    NO      [YES]

[◀▶]SELECT       [ENTER]END
```

4


Happy Wedding
ENTER



```
LEVEL   0

[▲▼]ADJUST      [ENTER]OK
```

Printing with a Title
(Inserting your own titles)

With this function, you can use your Video Camera to capture titles that you created, allowing you to add an original title to the image.

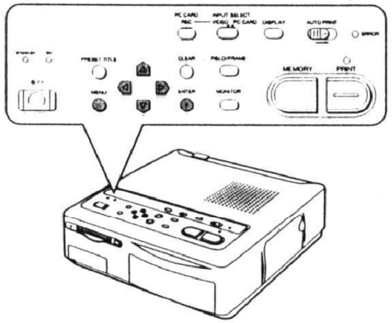
1 **Press the MENU Button, and then use the ▼ Button to select "TITLE".**

2 **Use the ▶ Button to select [SET].**

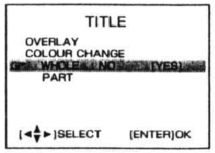
3 **Use the ◀ and ▶ Buttons to select [YES].**

4 **Adjust the level, and then press the ENTER Button.**
The value can be adjusted over a range from −9 to +9. Positive values make the title darker, and negative values make the title lighter.

5 **Print the title with the image.**

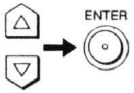

PC CARD
REC
INPUT SELECT
VIDEO
PC CARD
DISPLAY
AUTO PRINT
ERROR
STANDBY
ON
PRESET TITLE
CLEAR
FIELD/FRAME
MEMORY
PRINT
MENU
ENTER
MONITOR

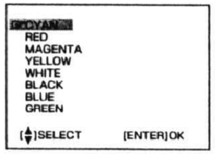
1



```
TITLE
OVERLAY
COLOUR CHANGE
  WHOLE    NO      [YES]
  PART

[◀▲▼▶]SELECT     [ENTER]OK
```

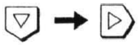
2

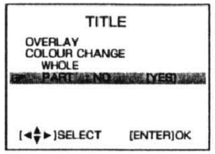




```
CYAN
 RED
 MAGENTA
 YELLOW
 WHITE
 BLACK
 BLUE
 GREEN

[▲▼]SELECT       [ENTER]OK
```

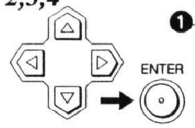
1

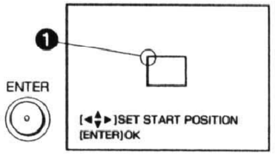




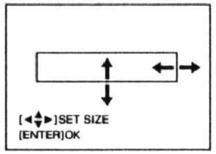
```
TITLE
OVERLAY
COLOUR CHANGE
  WHOLE
  PART     NO      [YES]

[◀▲▼▶]SELECT     [ENTER]OK
```

2,3,4

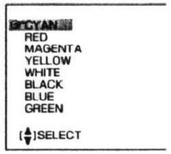




```
[◀▲▼▶]SET START POSITION
[ENTER]OK
```



```
[◀▲▼▶]SET SIZE
[ENTER]OK
```



```
CYAN
 RED
 MAGENTA
 YELLOW
 WHITE
 BLACK
 BLUE
 GREEN

[▲▼]SELECT
```

Changing the Colour of the Title

1. Select COLOUR CHANGE: WHOLE, and then select [YES].
2. Use the ▲ and ▼ Buttons to select the colour, and then press the ENTER Button.

Changing the Colour of Part of the Title

1. Select "PART", and then select [YES].

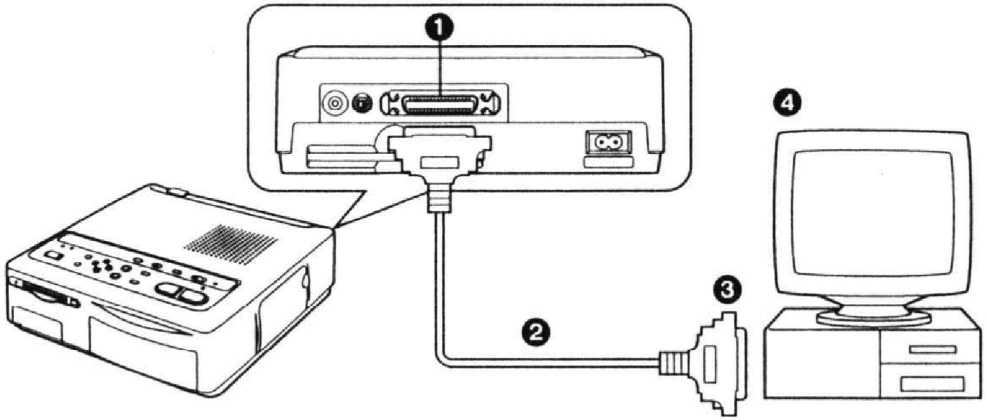
2. Use the ◀, ▲, ▼, and ▶ Buttons to select the upper left limit for the colour, and then press the ENTER Button.
❶ Upper Left Coner

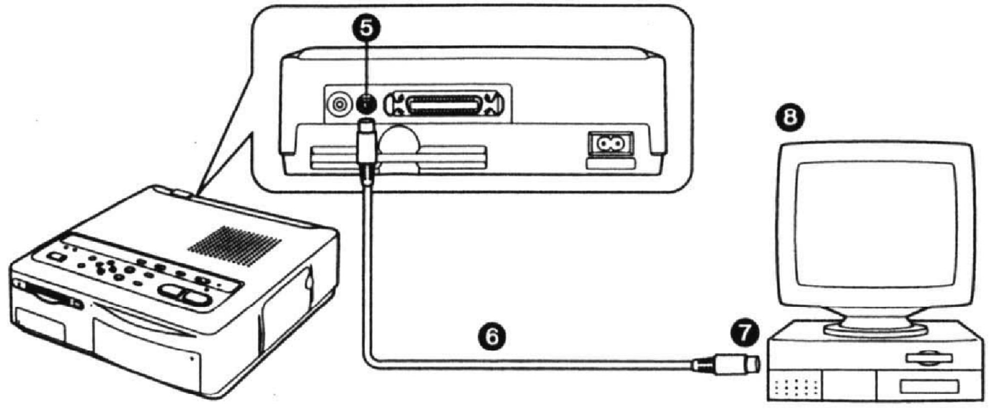
3. Use the ◀, ▲, ▼, and ▶ Buttons to select the size for the colour, and then press the ENTER Button.

4. Use the ▲ and ▼ Buttons to select the colour, and then press the ENTER Button.

- A title stored in memory is lost when the Digital Video Printer is turned off.
- When a new title is stored in memory, the previous title is erased.
- To temporarily erase a title stored in memory from the screen, set "TITLE" in MENU Mode to [OFF]. (When the setting is switched back to [ON], the stored title reappears on the screen.)
- When creating your own title, use a black marker on white paper.
- The MACRO function on the Video Camera is useful for capturing titles.
Be sure to also read the Operating Instructions for the Video Camera.

(Except Mu Model)





Connections When Using as Personal Computer Printer

■ When Connecting to a Windows (PC/AT) Computer:

A printer cable (available at computer shops) is required to connect the Video Printer.
Obtain the proper printer cable for your computer.

❶ PARALLEL Socket
❷ Printer cable (available at computer shops)
❸ To parallel port socket
❹ Windows PC (available at computer shops)

■ When Connecting to a Macintosh Computer:

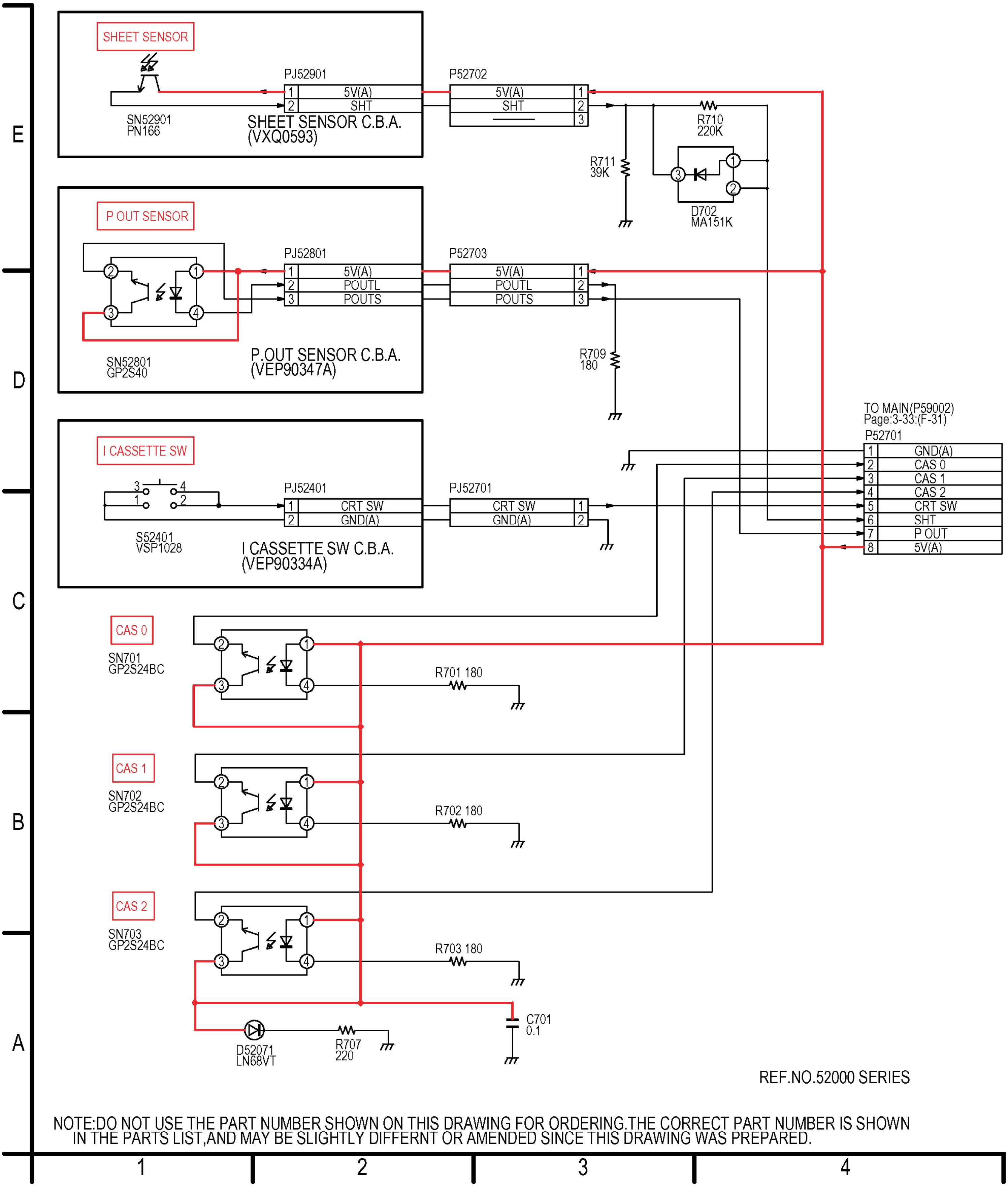
A printer cable for Macintosh computers (available at computer shops) is required to connect the Video Printer.

❺ SERIAL Socket
❻ Printer cable (available at computer shops)
❼ To printer port or modem port socket
❽ Macintosh computer (available at computer shops)

After connecting the computer to the Video Printer, the settings (Setup) are performed at the Windows PC or the Macintosh computer.
Refer to the separate Printer Driver Manual for more information.

Installation Notes:
The temperature inside this printer can become extremely hot due to the thermal sublimation transfer printing system. For this reason, the printer should be used in a well-ventilated location. Also, objects should not be placed on top of the printer.
Be sure to leave at least 10 cm behind the printer so that paper can be removed from the paper removal port if a paper jam occurs.

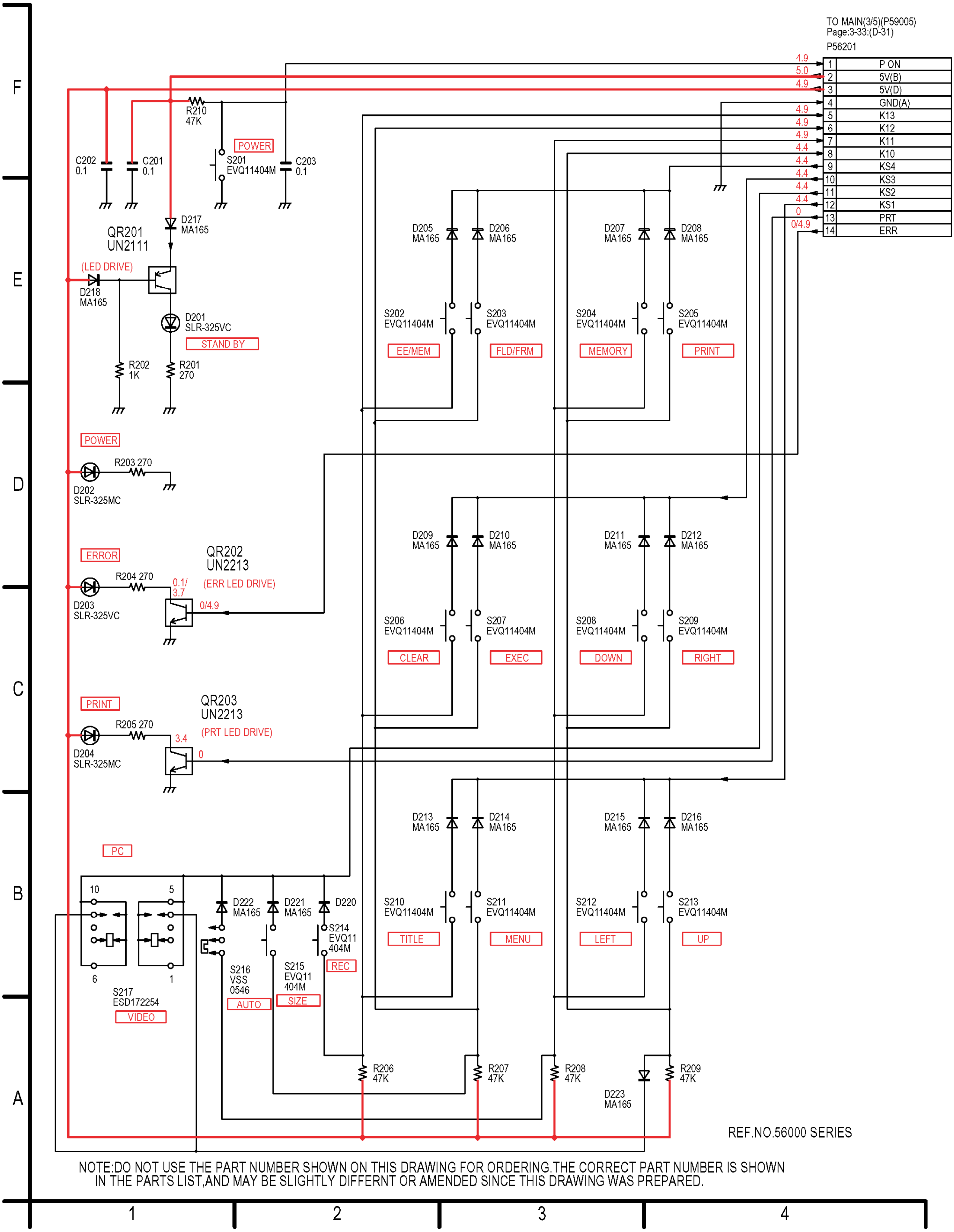
CASSETTE SENSOR / SHEET SENSOR / P OUT SENSOR / I CASSETTE SWITCH SCHEMATIC DIAGRAM


E
D
C
B
A
1
2
3
4
SHEET SENSOR
SN52901
PN166
PJ52901
1 5V(A)
2 SHT
SHEET SENSOR C.B.A.
(VXQ0593)
P52702
5V(A) 1
SHT 2
3
R710
220K
R711
39K
D702
MA151K
P OUT SENSOR
SN52801
GP2S40
PJ52801
1 5V(A)
2 POUTL
3 POUTS
P.OUT SENSOR C.B.A.
(VEP90347A)
P52703
5V(A) 1
POUTL 2
POUTS 3
R709
180
I CASSETTE SW
S52401
VSP1028
PJ52401
1 CRT SW
2 GND(A)
I CASSETTE SW C.B.A.
(VEP90334A)
PJ52701
CRT SW 1
GND(A) 2
TO MAIN(P59002)
Page:3-33:(F-31)
P52701
1 GND(A)
2 CAS 0
3 CAS 1
4 CAS 2
5 CRT SW
6 SHT
7 P OUT
8 5V(A)
CAS 0
SN701
GP2S24BC
R701 180
CAS 1
SN702
GP2S24BC
R702 180
CAS 2
SN703
GP2S24BC
R703 180
D52071
LN68VT
R707
220
C701
0.1

REF.NO.52000 SERIES

NOTE:DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING.THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST,AND MAY BE SLIGHTLY DIFFERNT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

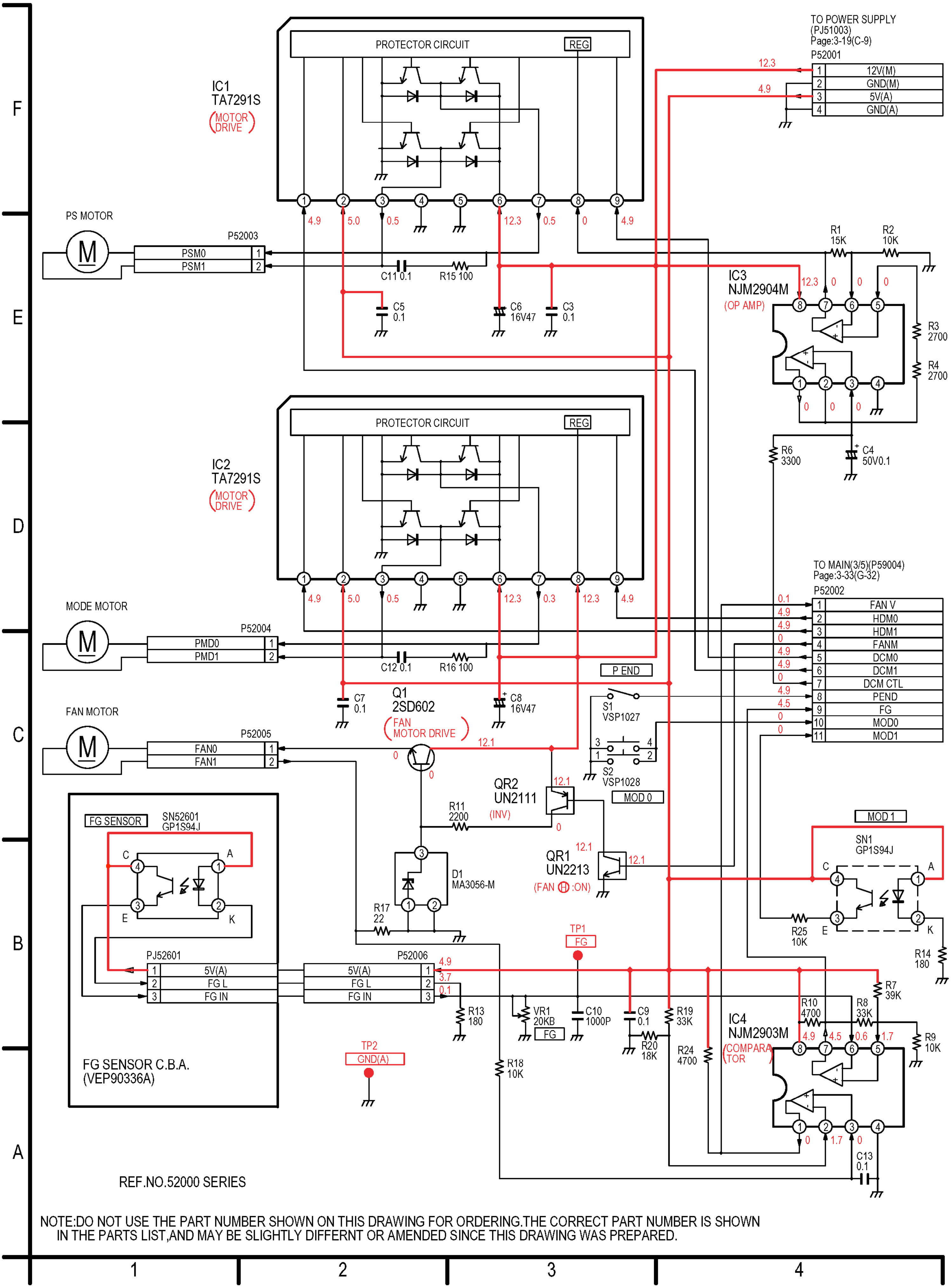
OPERATION SCHEMATIC DIAGRAM


TO MAIN(3/5)(P59005)
Page:3-33:(D-31)
P56201
1 P ON 4.9
2 5V(B) 5.0
3 5V(D) 4.9
4 GND(A)
5 K13 4.9
6 K12 4.9
7 K11 4.9
8 K10 4.4
9 KS4 4.4
10 KS3 4.4
11 KS2 4.4
12 KS1 4.4
13 PRT 0
14 ERR 0/4.9
R210 47K
POWER
S201 EVQ11404M
C202 0.1
C201 0.1
C203 0.1
D217 MA165
QR201 UN2111
(LED DRIVE)
D218 MA165
D201 SLR-325VC
STAND BY
R202 1K
R201 270
POWER
R203 270
D202 SLR-325MC
ERROR
R204 270
QR202 UN2213
(ERR LED DRIVE)
0.1/3.7
0/4.9
D203 SLR-325VC
PRINT
R205 270
QR203 UN2213
(PRT LED DRIVE)
3.4
0
D204 SLR-325MC
PC
S217 ESD172254
VIDEO
D222 MA165
D221 MA165
D220
S214 EVQ11404M
REC
S216 VSS0546
AUTO
S215 EVQ11404M
SIZE
D205 MA165
D206 MA165
D207 MA165
D208 MA165
S202 EVQ11404M
EE/MEM
S203 EVQ11404M
FLD/FRM
S204 EVQ11404M
MEMORY
S205 EVQ11404M
PRINT
D209 MA165
D210 MA165
D211 MA165
D212 MA165
S206 EVQ11404M
CLEAR
S207 EVQ11404M
EXEC
S208 EVQ11404M
DOWN
S209 EVQ11404M
RIGHT
D213 MA165
D214 MA165
D215 MA165
D216 MA165
S210 EVQ11404M
TITLE
S211 EVQ11404M
MENU
S212 EVQ11404M
LEFT
S213 EVQ11404M
UP
R206 47K
R207 47K
R208 47K
R209 47K
D223 MA165
10
5
6
1
F
E
D
C
B
A
1
2
3
4

REF.NO.56000 SERIES

NOTE:DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING.THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST,AND MAY BE SLIGHTLY DIFFERNT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

MOTOR DRIVE AND FG SENSOR

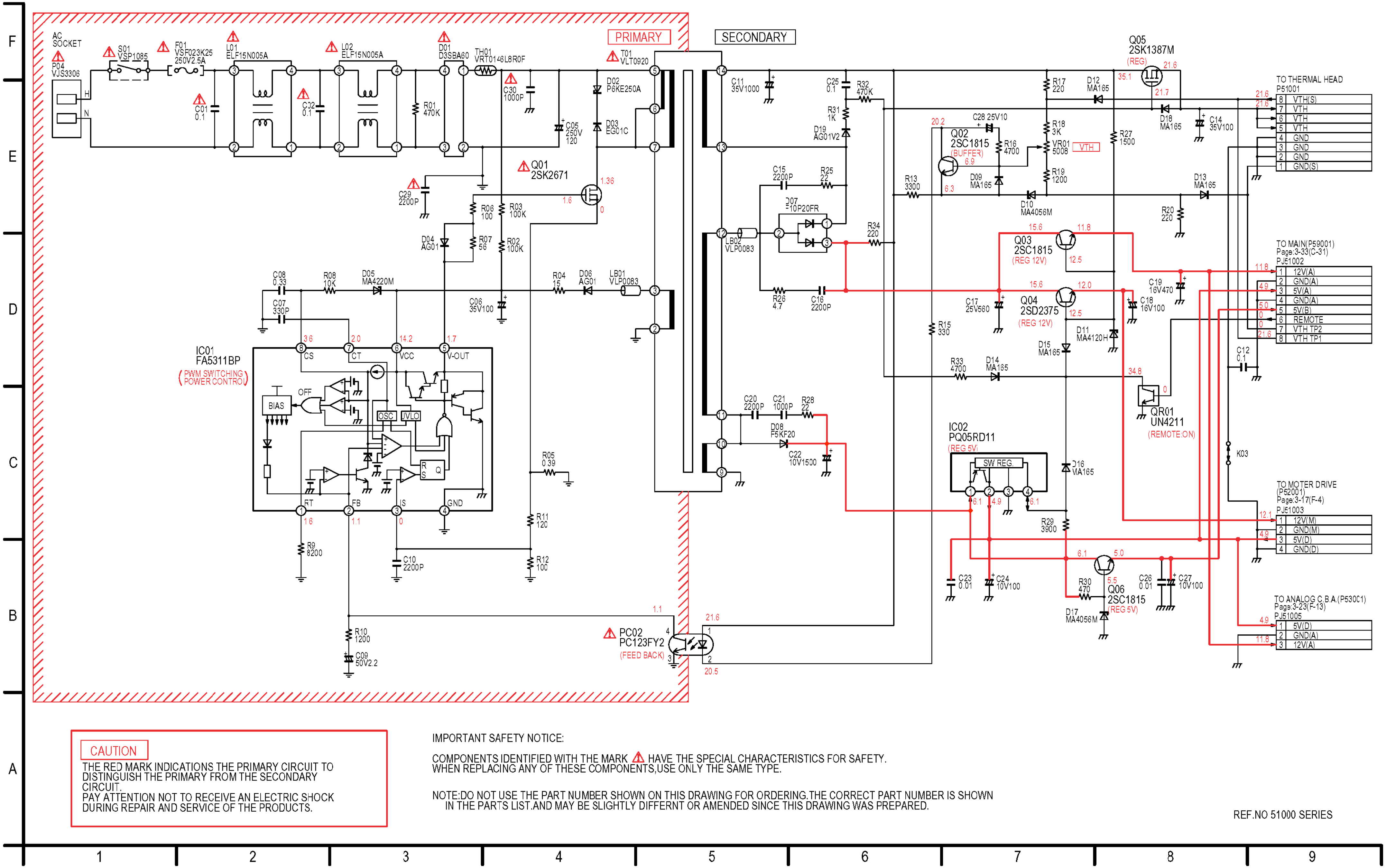


PROTECTOR CIRCUIT
REG
IC1
TA7291S
(MOTOR DRIVE)
IC2
TA7291S
(MOTOR DRIVE)
TO POWER SUPPLY
(PJ51003)
Page:3-19(C-9)
P52001
1 12V(M)
2 GND(M)
3 5V(A)
4 GND(A)
12.3
4.9
PS MOTOR
P52003
PSM0 1
PSM1 2
C11 0.1
R15 100
C5 0.1
C6 16V47
C3 0.1
R1 15K
R2 10K
IC3
NJM2904M
(OP AMP)
R3 2700
R4 2700
R6 3300
C4 50V0.1
MODE MOTOR
P52004
PMD0 1
PMD1 2
C12 0.1
R16 100
C7 0.1
C8 16V47
FAN MOTOR
P52005
FAN0 1
FAN1 2
Q1
2SD602
(FAN MOTOR DRIVE)
12.1
P END
S1
VSP1027
S2
VSP1028
MOD 0
MOD 1
QR2
UN2111
(INV)
QR1
UN2213
(FAN Ⓗ :ON)
R11 2200
D1
MA3056-M
R17 22
TO MAIN(3/5)(P59004)
Page:3-33(G-32)
P52002
1 FAN V
2 HDM0
3 HDM1
4 FANM
5 DCM0
6 DCM1
7 DCM CTL
8 PEND
9 FG
10 MOD0
11 MOD1
SN1
GP1S94J
R25 10K
R14 180
FG SENSOR
SN52601
GP1S94J
C
A
E
K
PJ52601
1 5V(A)
2 FG L
3 FG IN
P52006
TP1
FG
TP2
GND(A)
R13 180
VR1 20KB
FG
C10 1000P
C9 0.1
R19 33K
R20 18K
R18 10K
R24 4700
IC4
NJM2903M
(COMPARATOR)
R10 4700
R8 33K
R7 39K
R9 10K
C13 0.1
FG SENSOR C.B.A.
(VEP90336A)
F
E
D
C
B
A
1
2
3
4

REF.NO.52000 SERIES

NOTE:DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING.THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST,AND MAY BE SLIGHTLY DIFFERNT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

POWER SUPPLY SCHEMATIC DIAGRAM


F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
PRIMARY
SECONDARY
AC SOCKET
P04
VJS3306
H
N
S01
VSP1085
F01
VSF023K25
250V2.5A
C01
0.1
L01
ELF15N005A
C02
0.1
L02
ELF15N005A
R01
470K
D01
D3SBA60
TH01
VRT0146L8R0F
C30
1000P
C05
250V
120
D02
P6KE250A
D03
EG1C
T01
VLT0920
Q01
2SK2671
1.36
1.6
0
C29
2200P
R06
100
R03
100K
D04
AG01
R07
56
R02
100K
C08
0.33
R08
10K
D05
MA4220M
C07
330P
C06
35V100
R04
15
D06
AG01
LB01
VLP0083
IC01
FA5311BP
(PWM SWITCHING POWER CONTROL)
3.6
2.0
14.2
1.7
CS
CT
VCC
V-OUT
OFF
BIAS
OSC
UVLO
R
S
Q
RT
FB
IS
GND
1.6
1.1
0
R9
8200
C10
2200P
R05
0.39
R11
120
R12
100
R10
1200
C09
50V2.2
PC02
PC123FY2
(FEED BACK)
1.1
21.6
20.5
C11
35V1000
C25
0.1
R32
470K
R31
1K
D19
AG01V2
C15
2200P
R25
22
D07
10P20FR
LB02
VLP0083
R34
220
R26
4.7
C16
2200P
C20
2200P
C21
1000P
R28
22
D08
F5KF20
C22
10V1500
R13
3300
C28 25V10
20.2
Q02
2SC1815
(BUFFER)
6.9
6.3
R16
4700
D09
MA165
D10
MA4056M
R17
220
R18
3K
VR01
5008
VTH
R19
1200
D12
MA165
R27
1500
Q05
2SK1387M
(REG)
35.1
21.6
21.7
D18
MA165
C14
35V100
D13
MA165
R20
220
15.6
11.8
Q03
2SC1815
(REG 12V)
12.5
15.6
12.0
Q04
2SD2375
(REG 12V)
12.5
C17
25V560
R15
330
C19
16V470
C18
16V100
D11
MA4120H
D15
MA165
R33
4700
D14
MA165
34.8
0
QR01
UN4211
(REMOTE:ON)
C12
0.1
K03
IC02
PQ05RD11
(REG 5V)
SW REG.
6.1
4.9
6.1
D16
MA165
R29
3900
6.1
5.0
C23
0.01
C24
10V100
R30
470
5.5
Q06
2SC1815
(REG 5V)
C26
0.01
C27
10V100
D17
MA4056M
TO THERMAL HEAD
P51001
21.6
21.6
8 VTH(S)
7 VTH
6 VTH
5 VTH
4 GND
3 GND
2 GND
1 GND(S)
TO MAIN(P59001)
Page:3-33(C-31)
PJ51002
11.8
4.9
5.0
0
0
21.6
1 12V(A)
2 GND(A)
3 5V(A)
4 GND(A)
5 5V(B)
6 REMOTE
7 VTH TP2
8 VTH TP1
TO MOTER DRIVE
(P52001)
Page:3-17(F-4)
PJ51003
12.1
4.9
1 12V(M)
2 GND(M)
3 5V(D)
4 GND(D)
TO ANALOG C.B.A.(P530C1)
Page:3-23(F-13)
PJ51005
4.9
11.8
1 5V(D)
2 GND(A)
3 12V(A)

CAUTION

THE RED MARK INDICATIONS THE PRIMARY CIRCUIT TO DISTINGUISH THE PRIMARY FROM THE SECONDARY CIRCUIT.
PAY ATTENTION NOT TO RECEIVE AN ELECTRIC SHOCK DURING REPAIR AND SERVICE OF THE PRODUCTS.

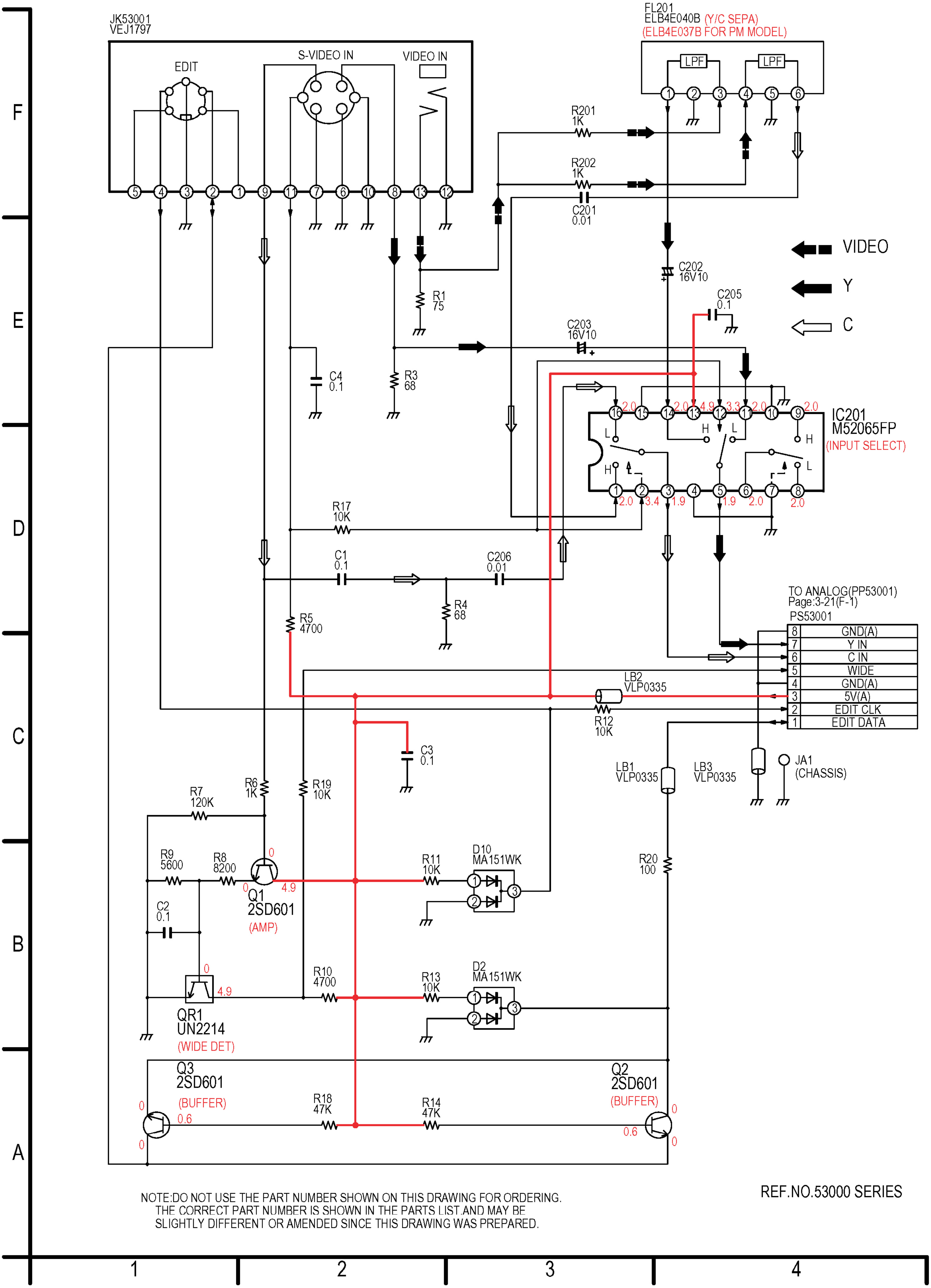
IMPORTANT SAFETY NOTICE:

COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS,USE ONLY THE SAME TYPE.

NOTE:DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING.THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST.AND MAY BE SLIGHTLY DIFFERNT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

REF.NO 51000 SERIES

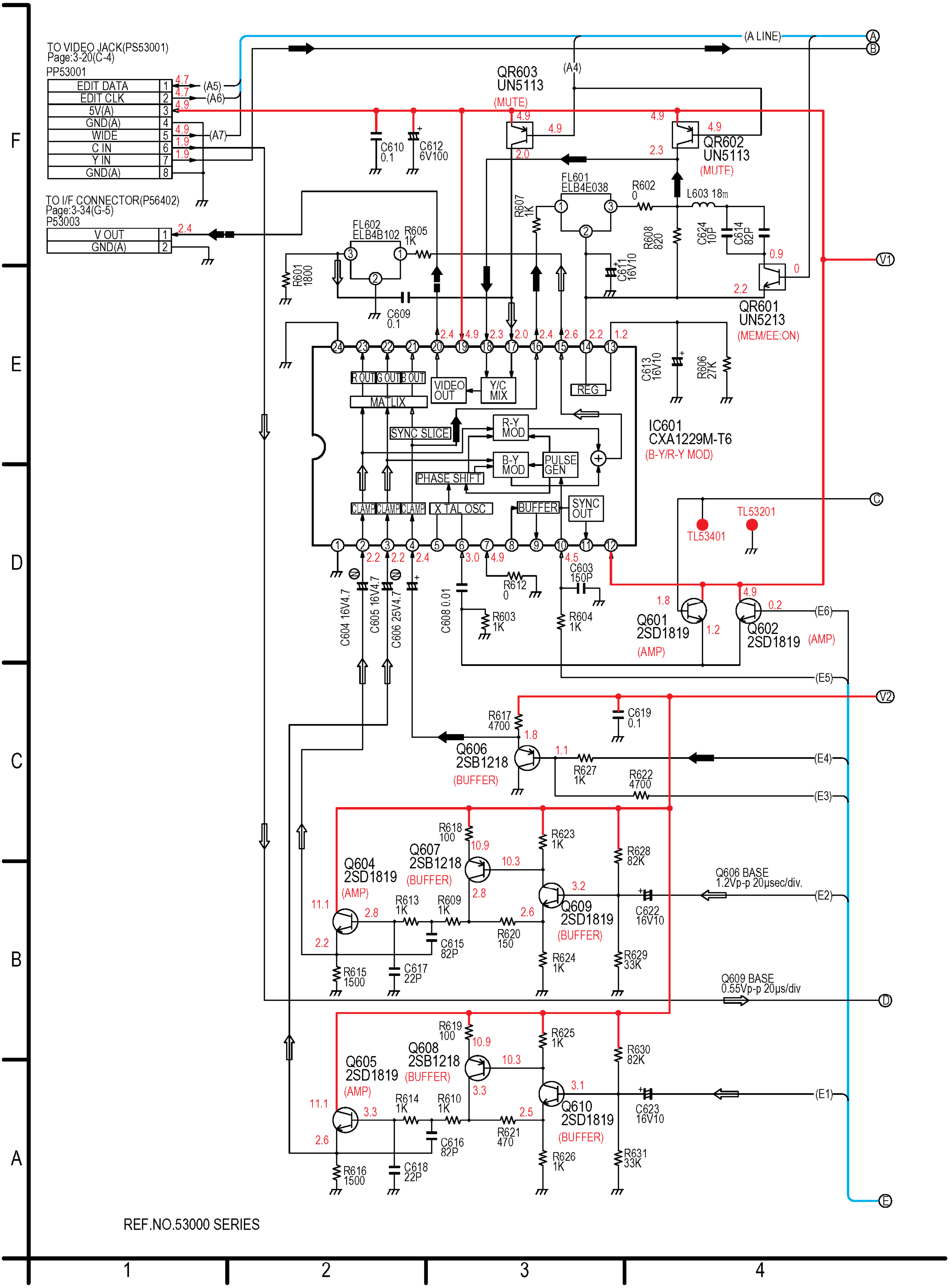
VIDEO JACK SCHEMATIC DIAGRAM


JK53001
VEJ1797
EDIT
S-VIDEO IN
VIDEO IN
FL201
ELB4E040B (Y/C SEPA)
(ELB4E037B FOR PM MODEL)
LPF
LPF
R201
1K
R202
1K
C201
0.01
R1
75
C202
16V10
C205
0.1
C203
16V10
VIDEO
Y
C
C4
0.1
R3
68
IC201
M52065FP
(INPUT SELECT)
H
L
2.0
4.9
3.3
3.4
1.9
R17
10K
C1
0.1
C206
0.01
R4
68
R5
4700
TO ANALOG(PP53001)
Page:3-21(F-1)
PS53001
8 GND(A)
7 Y IN
6 C IN
5 WIDE
4 GND(A)
3 5V(A)
2 EDIT CLK
1 EDIT DATA
LB2
VLP0335
R12
10K
C3
0.1
LB1
VLP0335
LB3
VLP0335
JA1
(CHASSIS)
R7
120K
R6
1K
R19
10K
R9
5600
R8
8200
Q1
2SD601
(AMP)
R11
10K
D10
MA151WK
C2
0.1
R20
100
QR1
UN2214
(WIDE DET)
R10
4700
R13
10K
D2
MA151WK
Q3
2SD601
(BUFFER)
0.6
R18
47K
R14
47K
Q2
2SD601
(BUFFER)
0
F
E
D
C
B
A
1
2
3
4

NOTE:DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING.
THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST.AND MAY BE
SLIGHTLY DIFFERENT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

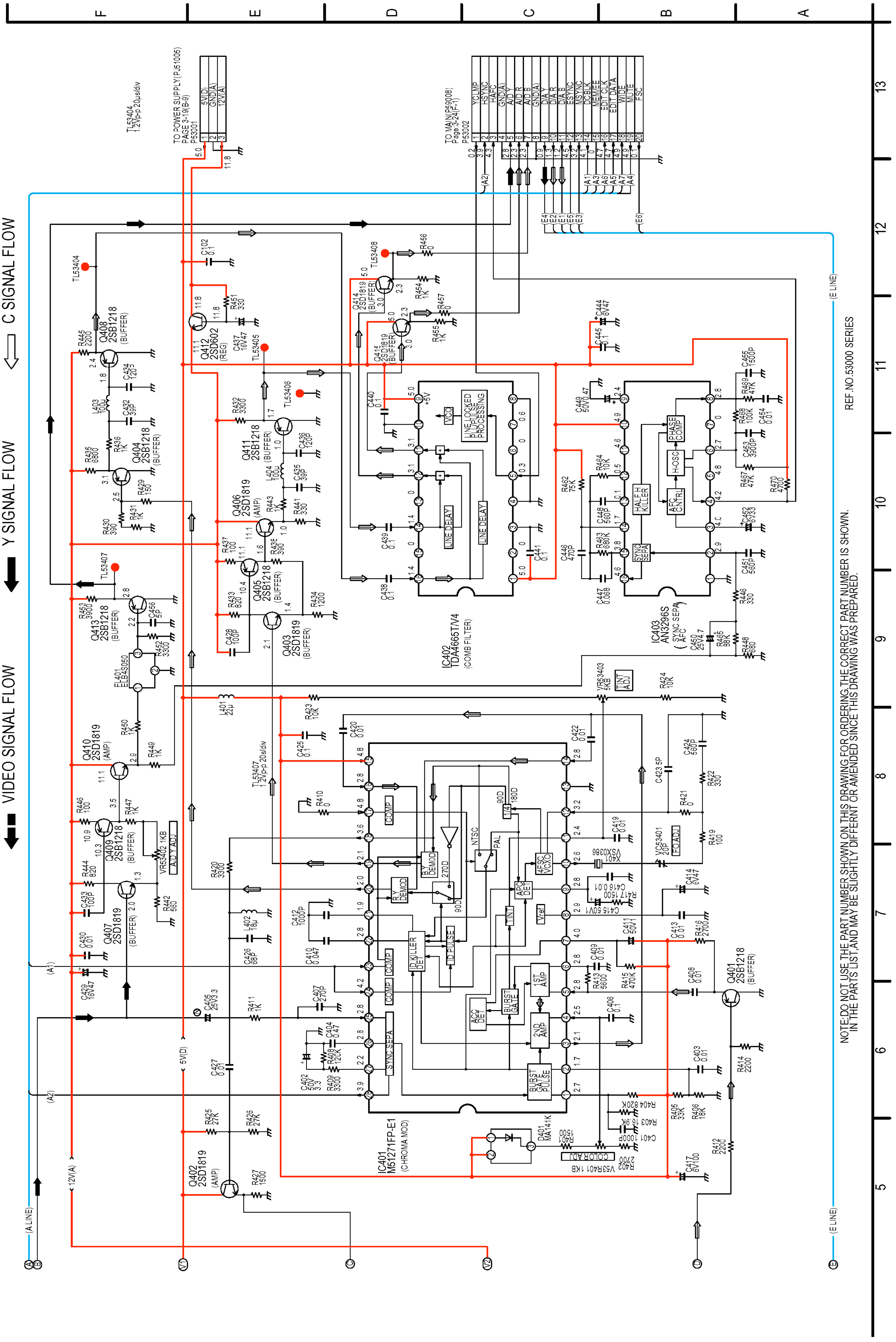
REF.NO.53000 SERIES

ANALOG SCHEMATIC DIAGRAM



TO VIDEO JACK(PS53001)
Page:3-20(C-4)
PP53001
1 EDIT DATA
2 EDIT CLK
3 5V(A)
4 GND(A)
5 WIDE
6 C IN
7 Y IN
8 GND(A)
(A5)
(A6)
(A7)
(A4)
(A LINE)
TO I/F CONNECTOR(P56402)
Page:3-34(G-5)
P53003
1 V OUT
2 GND(A)
QR603
UN5113
(MUTE)
QR602
UN5113
(MUTE)
QR601
UN5213
(MEM/EE:ON)
C610 0.1
C612 6V100
FL601
ELB4E038
FL602
ELB4B102
R601 1800
R602 0
R605 1K
R606 27K
R607 1K
R608 820
L603 18m
C624 10P
C614 82P
C611 16V10
C609 0.1
C613 16V10
IC601
CXA1229M-T6
(B-Y/R-Y MOD)
R OUT
G OUT
B OUT
MATLIX
VIDEO OUT
Y/C MIX
REG
SYNC SLICE
R-Y MOD
B-Y MOD
PULSE GEN
PHASE SHIFT
CLAMP
CLAMP
CLAMP
X TAL OSC
BUFFER
SYNC OUT
C604 16V4.7
C605 16V4.7
C606 25V4.7
C608 0.01
R603 1K
R612 0
C603 150P
R604 1K
TL53401
TL53201
Q601
2SD1819
(AMP)
Q602
2SD1819
(AMP)
R617 4700
C619 0.1
Q606
2SB1218
(BUFFER)
R627 1K
R622 4700
R618 100
R623 1K
R628 82K
Q604
2SD1819
(AMP)
Q607
2SB1218
(BUFFER)
R613 1K
R609 1K
R620 150
C615 82P
C617 22P
R615 1500
Q609
2SD1819
(BUFFER)
C622 16V10
R624 1K
R629 33K
Q606 BASE
1.2Vp-p 20µsec/div.
Q609 BASE
0.55Vp-p 20µs/div
R619 100
R625 1K
R630 82K
Q605
2SD1819
(AMP)
Q608
2SB1218
(BUFFER)
R614 1K
R610 1K
R621 470
C616 82P
C618 22P
R616 1500
Q610
2SD1819
(BUFFER)
C623 16V10
R626 1K
R631 33K
(E1)
(E2)
(E3)
(E4)
(E5)
(E6)
A
B
C
D
E
V1
V2
F
E
D
C
B
A
1
2
3
4

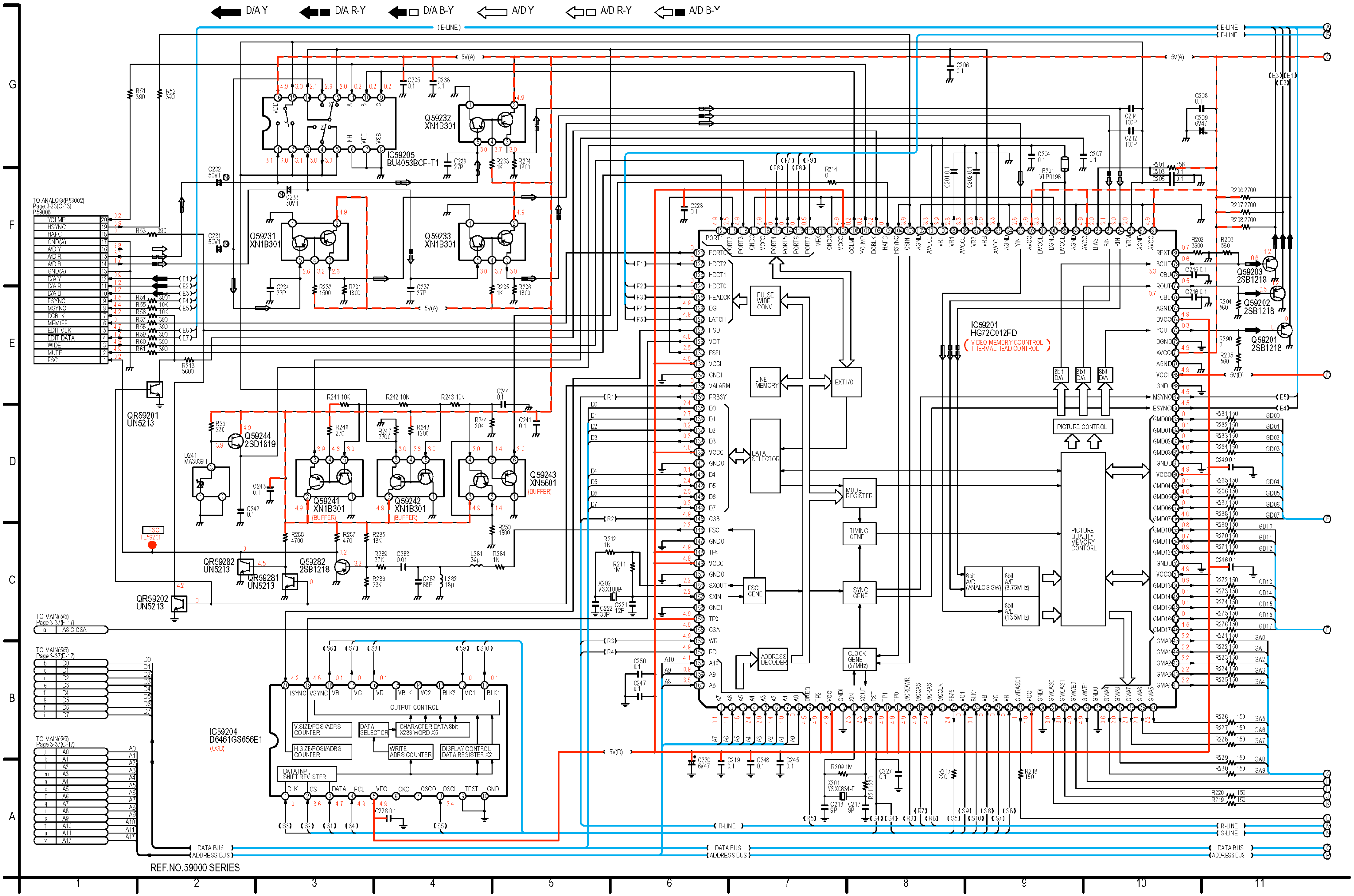
REF.NO.53000 SERIES


VIDEO SIGNAL FLOW
Y SIGNAL FLOW
C SIGNAL FLOW
A
B
C
D
E
F
5
6
7
8
9
10
11
12
13
TO POWER SUPPLY(PJ51005)
PAGE 3-19(B-9)
P53001
1 5V(D)
2 GND(A)
3 12V(A)
TL53404
1.2Vp-p 20us/div
TO MAIN(P59008)
Page 3-24(F-1)
P53002
1 YCLMP
2 HSYNC
3 HAFC
4 GND(A)
5 A/D Y
6 A/D R
7 A/D B
8 GND(A)
9 D/A Y
10 D/A R
11 D/A B
12 ESYNC
13 MSYNC
14 DCBLK
15 MEMEE
16 EDIT CLK
17 EDIT DATA
18 WIDE
19 MUTE
20 FSC
IC401
M51271FP-E1
(CHROMA MOD)
SYNC SEPA
COMP
1ST AMP
2ND AMP
BURST GATE
BURST GATE PULSE
ACC DET
ID KILLER DET
ID PULSE
APC DET
4FSC VCXO
B-Y DEMOD
R-Y DEMOD
TINT
Vref
NTSC
PAL
1/4
IC402
TDA4665T/V4
(COMB FILTER)
LINE DELAY
LINE LOCKED CLK,PULSE PROCESSING
VCO
IC403
AN3296S
(SYNC SEPA / AFC)
SYNC SEPA
HALF H KILLER
AFC CNT'RL
H-OSC
PHASE COMP
Q401 2SB1218 (BUFFER)
Q402 2SD1819 (AMP)
Q403 2SD1819 (BUFFER)
Q404 2SB1218 (BUFFER)
Q405 2SB1218 (BUFFER)
Q406 2SD1819 (AMP)
Q407 2SD1819 (BUFFER)
Q408 2SB1218 (BUFFER)
Q409 2SB1218 (BUFFER)
Q410 2SD1819 (AMP)
Q411 2SB1218 (BUFFER)
Q412 2SD602 (REG)
Q413 2SB1218 (BUFFER)
Q414 2SD1819 (BUFFER)
Q415 2SD1819 (BUFFER)
EL401 ELB4S050
VR53402 1KB A.DLY ADJ
VR53401 1KB COLOR ADJ
VR53403 5KB TINT ADJ
VC53401 20P FO ADJ
X401 VSX0386
D401 MA141K
TL53405
TL53406
TL53407
TL53407 1.2Vp-p 20s/div
TL53408
(A LINE)
(E LINE)
12V(A)
5V(D)
V1
V2

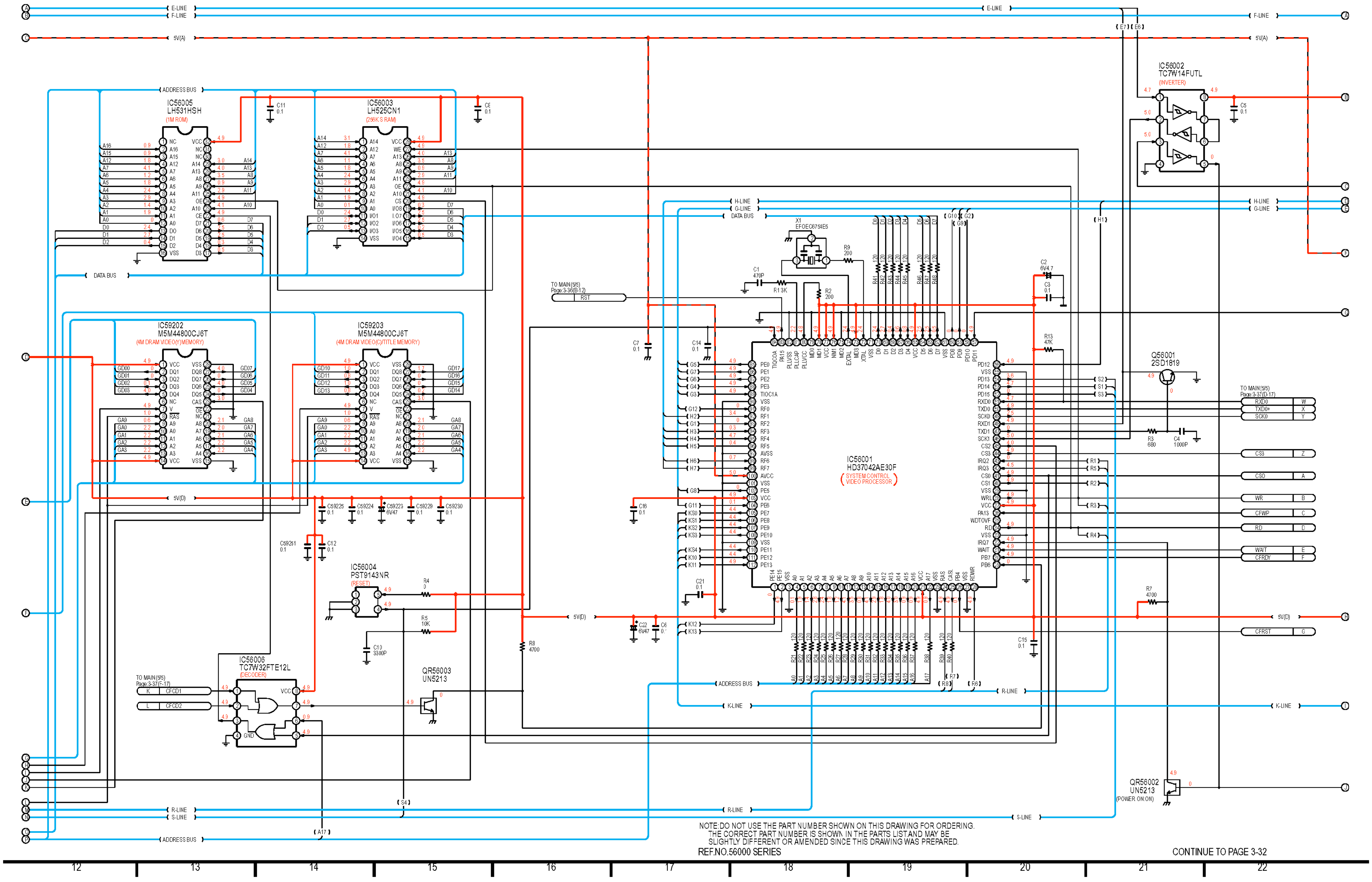
NOTE:DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING.THE CORRECT PART NUMBER IS SHOWN. IN THE PARTS LIST,AND MAY BE SLIGHTLY DIFFERENT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

REF.NO.53000 SERIES

MAIN (1/2) <SYSTEM CONTROL / DIGITAL PROCESS / HEAD CONTROL SECTION > SCHEMATIC DIAGRAM


D/A Y
D/A R-Y
D/A B-Y
A/D Y
A/D R-Y
A/D B-Y
(E-LINE)
E-LINE
F-LINE
5V(A)
5V(D)
R-LINE
S-LINE
DATA BUS
ADDRESS BUS
TO ANALOG(P53002) Page 3-23(C-13) P59008
YCLMP
HSYNC
HAFC
GND(A)
A/D Y
A/D R
A/D B
GND(A)
D/A Y
D/A R
D/A B
ESYNC
MSYNC
DCBLK
MEMEE
EDIT CLK
EDIT DATA
WIDE
MUTE
FSC
IC59205 BU4053BCF-T1
Q59232 XN1B301
Q59231 XN1B301
Q59233 XN1B301
QR59201 UN5213
QR59202 UN5213
QR59281 UN5213
QR59282 UN5213
Q59244 2SD1819
D241 MA3039H
Q59241 XN1B301 (BUFFER)
Q59242 XN1B301 (BUFFER)
Q59243 XN5601 (BUFFER)
Q59282 2SB1218
FSC TL59201
X202 VSX1009-T
IC59201 HG72C012FD
(VIDEO MEMORY COUNTROL THERMAL HEAD CONTROL)
PULSE WIDE CONV.
LINE MEMORY
EXT.I/O
DATA SELECTOR
MODE REGISTER
TIMING GENE
SYNC GENE
CLOCK GENE (27MHz)
FSC GENE
ADDRESS DECODER
PICTURE CONTROL
PICTURE QUALITY MEMORY CONTORL
8bit A/D (ANALOG SW)
8bit A/D (6.75MHz)
8bit A/D (13.5MHz)
8bit D/A
Q59203 2SB1218
Q59202 2SB1218
Q59201 2SB1218
X201 VSX0834-T
IC59204 D6461GS656E1 (OSD)
OUTPUT CONTROL
V SIZE/POSI/ADRS COUNTER
H SIZE/POSI/ADRS COUNTER
DATA SELECTOR
CHARACTER DATA 8bit X288 WORD X5
WRITE ADRS COUNTER
DISPLAY CONTROL DATA REGISTER X2
DATA INPUT SHIFT REGISTER
TO MAIN(5/5) Page 3-37(F-17)
ASIC CSA
TO MAIN(5/5) Page 3-37(E-17)
TO MAIN(5/5) Page 3-37(C-17)
A
B
C
D
E
F
G
1
2
3
4
5
6
7
8
9
10
11

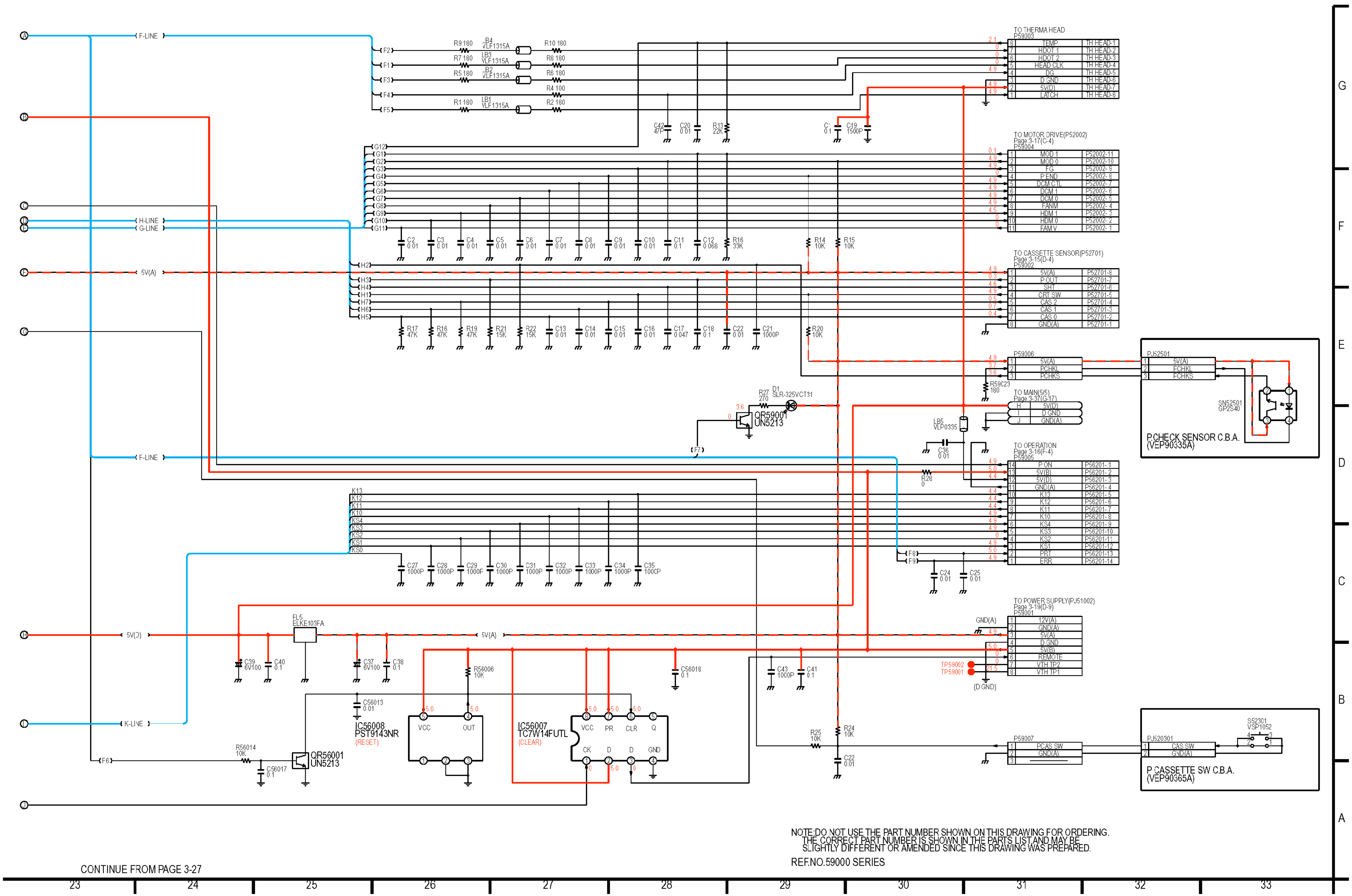
REF.NO.59000 SERIES


IC56005
LH531HSH
(1M ROM)
IC56003
LH525CN1
(256K S RAM)
IC59202
M5M44800CJ6T
(4M DRAM VIDEO(Y)MEMORY)
IC59203
M5M44800CJ6T
(4M DRAM VIDEO(C)/TITLE MEMORY)
IC56001
HD37042AE30F
(SYSTEM CONTROL VIDEO PROCESSOR)
IC56002
TC7W14FUTL
(INVERTER)
IC56004
PST9143NR
(RESET)
IC56006
TC7W32FTE12L
(DECODER)
Q56001
2SD1819
QR56002
UN5213
(POWER ON:ON)
QR56003
UN5213
X1
EFOEC6754E5
E-LINE
F-LINE
5V(A)
5V(D)
H-LINE
G-LINE
DATA BUS
ADDRESS BUS
R-LINE
S-LINE
K-LINE
TO MAIN(5/5) Page 3-36(B-12)
RST
TO MAIN(5/5) Page 3-37(D-17)
RXD0
TXD0+
SCK0
CS3
CS0
WR
CFWP
RD
WAIT
CFRDY
CFRST
TO MAIN(5/5) Page 3-37(F-17)
CFCD1
CFCD2
12
13
14
15
16
17
18
19
20
21
22

NOTE:DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING.
THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST AND MAY BE
SLIGHTLY DIFFERENT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

REF.NO.56000 SERIES

CONTINUE TO PAGE 3-32


TO THERMA HEAD
P59003
TEMP
HDOT 1
HDOT 2
HEAD CLK
DG
D GND
5V(D)
LATCH
TH HEAD-1
TH HEAD-2
TH HEAD-3
TH HEAD-4
TH HEAD-5
TH HEAD-6
TH HEAD-7
TH HEAD-8
TO MOTOR DRIVE(P52002)
Page 3-17(C-4)
P59004
MOD 1
MOD 0
FG
P.END
DCM CTL
DCM 1
DCM 0
FANM
HDM 1
HDM 0
FAM V
TO CASSETTE SENSOR(P52701)
Page 3-15(D-4)
P59002
5V(A)
P.OUT
SHT
CRT SW
CAS 2
CAS 1
CAS 0
GND(A)
P59006
5V(A)
PCHKL
PCHKS
PJ52501
SN52501
GP2S40
P.CHECK SENSOR C.B.A.
(VEP90335A)
TO MAIN(5/5)
Page 3-37(G-17)
5V(D)
D GND
GND(A)
LB5
VLP0335
TO OPERATION
Page 3-16(F-4)
P59005
P ON
5V(B)
5V(D)
GND(A)
K13
K12
K11
K10
KS4
KS3
KS2
KS1
PRT
ERR
TO POWER SUPPLY(PJ51002)
Page 3-19(D-9)
P59001
12V(A)
GND(A)
5V(A)
D GND
5V(B)
REMOTE
VTH TP2
VTH TP1
TP59002
TP59001
(D GND)
P59007
PCAS SW
GND(A)
PJ520301
CAS SW
S52301
VSP1052
P CASSETTE SW C.B.A.
(VEP90365A)
F-LINE
H-LINE
G-LINE
5V(A)
5V(D)
K-LINE
R9 180
R7 180
R5 180
R1 180
R10 180
R8 180
R6 180
R4 100
R2 180
B4 VLF1315A
LB3 VLF1315A
B2 VLF1315A
LB1 VLF1315A
C42 47P
C20 0.01
R13 22K
C19 1500P
R14 10K
R15 10K
R16 33K
R17 47K
R18 47K
R19 47K
R21 15K
R22 15K
R20 10K
R59C23 180
D1 SLR-325VCT31
R27 270
QR59001 UN5213
R28 0
R24 10K
R25 10K
C22 0.01
FL5 ELKE103FA
C39 6V100
C40 0.1
C37 6V100
C38 0.1
C56013 0.01
R56006 10K
C56018 0.1
C43 1000P
C41 0.1
C24 0.01
C25 0.01
C36 0.01
IC56008 PST9143NR
(RESET)
VCC
OUT
IC56007 TC7W14FUTL
(CLEAR)
VCC PR CLR Q
CK D D GND
R56014 10K
C56017 0.1
QR56001 UN5213
G
F
E
D
C
B
A
23
24
25
26
27
28
29
30
31
32
33

NOTE:DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING.
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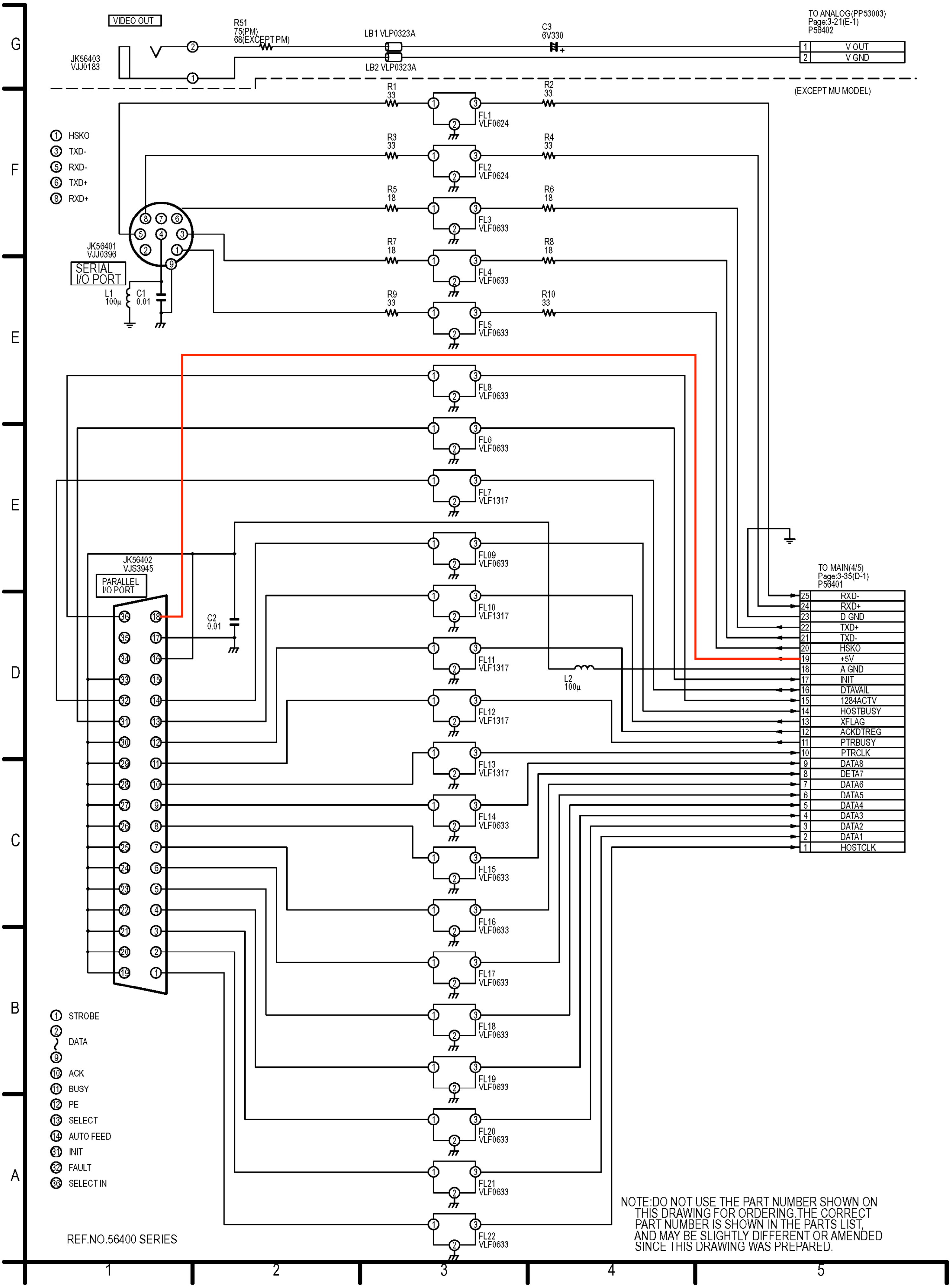
SLIGHTLY DIFFERENT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

REF.NO.59000 SERIES

CONTINUE FROM PAGE 3-27

I/F CONNECTOR SCHEMATIC DIAGRAM

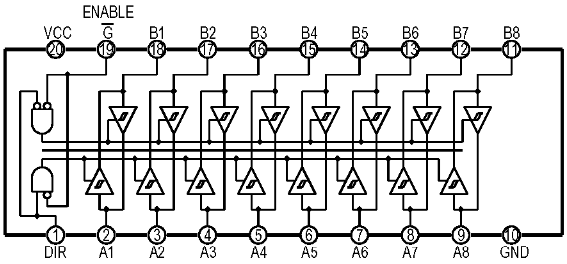

G
F
E
D
C
B
A
1
2
3
4
5
VIDEO OUT
JK56403
VJJ0183
R51
75(PM)
68(EXCEPT PM)
LB1 VLP0323A
LB2 VLP0323A
C3
6V330
TO ANALOG(PP53003)
Page:3-21(E-1)
P56402
1 V OUT
2 V GND
(EXCEPT MU MODEL)
R1 33
R2 33
FL1 VLF0624
R3 33
R4 33
FL2 VLF0624
R5 18
R6 18
FL3 VLF0633
R7 18
R8 18
FL4 VLF0633
R9 33
R10 33
FL5 VLF0633
① HSKO
③ TXD-
⑤ RXD-
⑥ TXD+
⑧ RXD+
JK56401
VJJ0396
SERIAL
I/O PORT
L1
100μ
C1
0.01
FL8 VLF0633
FL6 VLF0633
FL7 VLF1317
FL09 VLF0633
FL10 VLF1317
FL11 VLF1317
FL12 VLF1317
FL13 VLF1317
FL14 VLF0633
FL15 VLF0633
FL16 VLF0633
FL17 VLF0633
FL18 VLF0633
FL19 VLF0633
FL20 VLF0633
FL21 VLF0633
FL22 VLF0633
JK56402
VJS3945
PARALLEL
I/O PORT
C2
0.01
L2
100μ
TO MAIN(4/5)
Page:3-35(D-1)
P56401
25 RXD-
24 RXD+
23 D GND
22 TXD+
21 TXD-
20 HSKO
19 +5V
18 A GND
17 INIT
16 DTAVAIL
15 1284ACTV
14 HOSTBUSY
13 XFLAG
12 ACKDTREG
11 PTRBUSY
10 PTRCLK
9 DATA8
8 DETA7
7 DATA6
6 DATA5
5 DATA4
4 DATA3
3 DATA2
2 DATA1
1 HOSTCLK
① STROBE
② ~ ⑨ DATA
⑩ ACK
⑪ BUSY
⑫ PE
⑬ SELECT
⑭ AUTO FEED
㉛ INIT
㉜ FAULT
㊱ SELECT IN

REF.NO.56400 SERIES

NOTE:DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING.THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST, AND MAY BE SLIGHTLY DIFFERENT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

MAIN(2/2)<PC IF SECTION>SCHEMATIC DIAGRAM

74245
(OCTAL 3-STATE BUS TRANSCEIVERS)


ENABLE
VCC
G
B1
B2
B3
B4
B5
B6
B7
B8
20
19
18
17
16
15
14
13
12
11
1
2
3
4
5
6
7
8
9
10
DIR
A1
A2
A3
A4
A5
A6
A7
A8
GND

NOTE:DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING.
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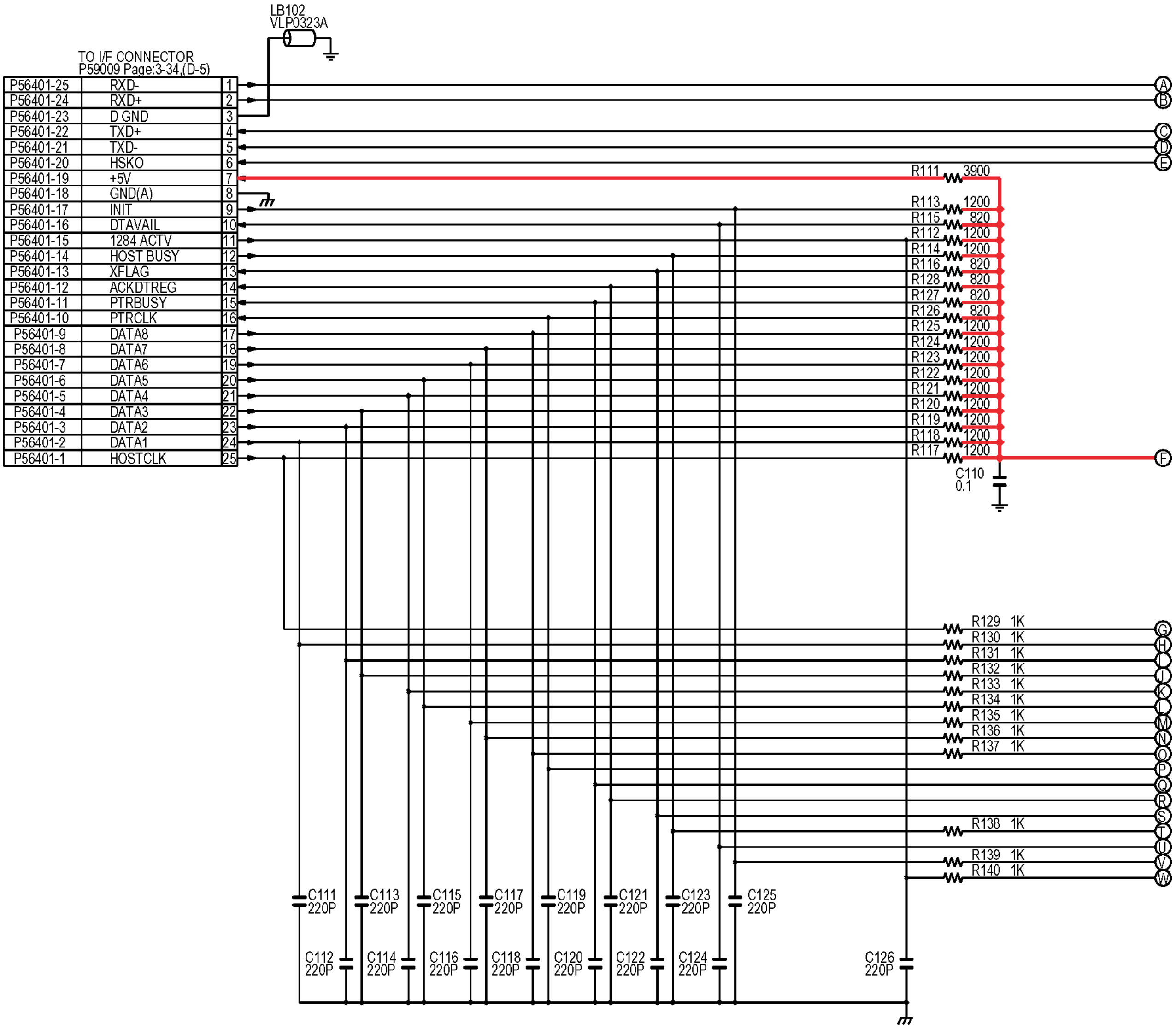
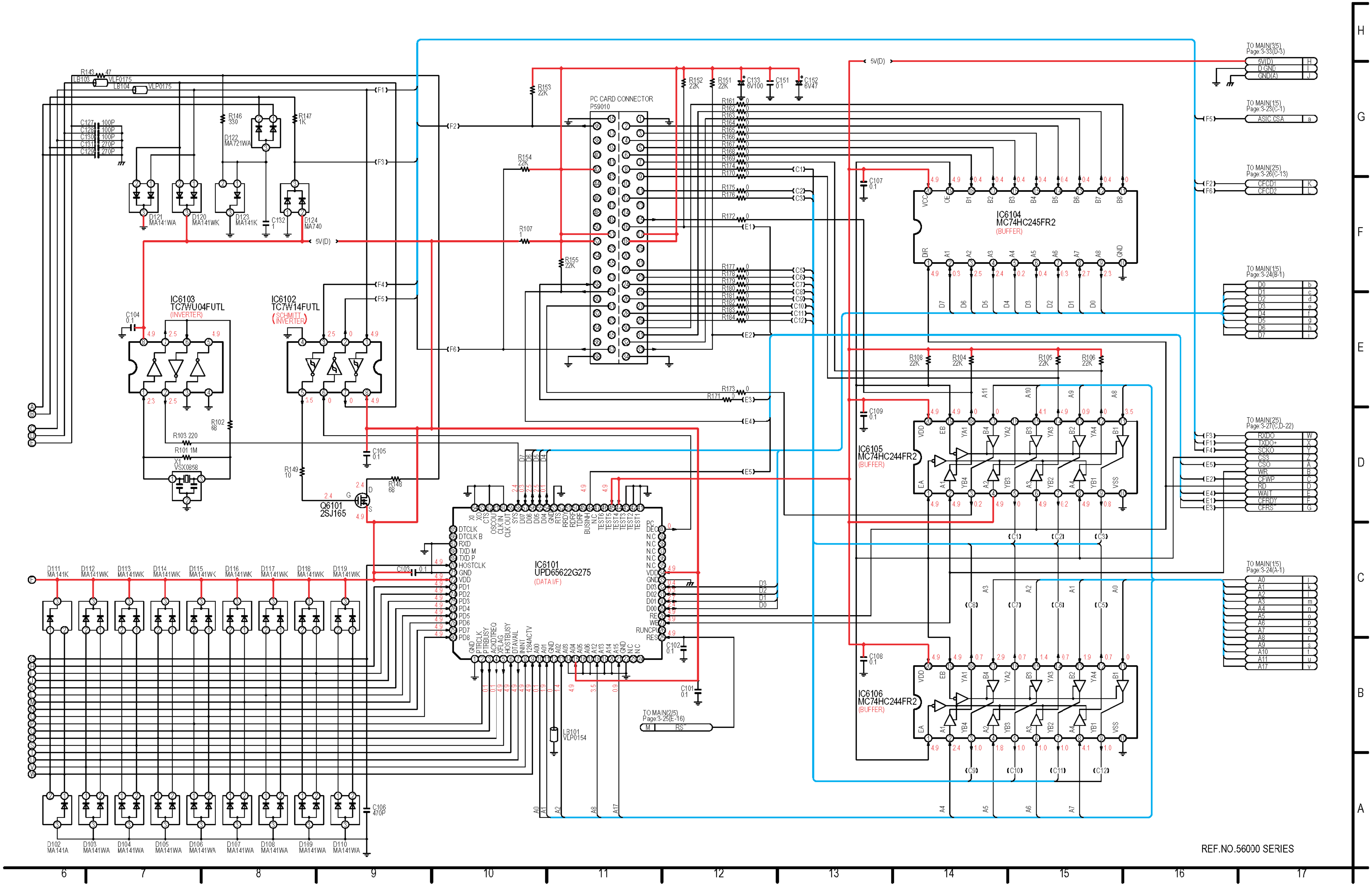
SLIGHTLY DIFFERENT OR AMENDED SINCE THIS DRAWING WAS PREPARED.


LB102
VLP0323A
TO I/F CONNECTOR
P59009 Page:3-34,(D-5)
P56401-25 RXD- 1
P56401-24 RXD+ 2
P56401-23 D GND 3
P56401-22 TXD+ 4
P56401-21 TXD- 5
P56401-20 HSKO 6
P56401-19 +5V 7
P56401-18 GND(A) 8
P56401-17 INIT 9
P56401-16 DTAVAIL 10
P56401-15 1284 ACTV 11
P56401-14 HOST BUSY 12
P56401-13 XFLAG 13
P56401-12 ACKDTREG 14
P56401-11 PTRBUSY 15
P56401-10 PTRCLK 16
P56401-9 DATA8 17
P56401-8 DATA7 18
P56401-7 DATA6 19
P56401-6 DATA5 20
P56401-5 DATA4 21
P56401-4 DATA3 22
P56401-3 DATA2 23
P56401-2 DATA1 24
P56401-1 HOSTCLK 25
A
B
C
D
E
R111 3900
R113 1200
R115 820
R112 1200
R114 1200
R116 820
R128 820
R127 820
R126 820
R125 1200
R124 1200
R123 1200
R122 1200
R121 1200
R120 1200
R119 1200
R118 1200
R117 1200
F
C110
0.1
R129 1K
R130 1K
R131 1K
R132 1K
R133 1K
R134 1K
R135 1K
R136 1K
R137 1K
R138 1K
R139 1K
R140 1K
G
H
I
J
K
L
M
N
O
P
Q
R
S
T
U
V
W
C111 220P
C113 220P
C115 220P
C117 220P
C119 220P
C121 220P
C123 220P
C125 220P
C112 220P
C114 220P
C116 220P
C118 220P
C120 220P
C122 220P
C124 220P
C126 220P
H
G
F
E
D
C
B
A
1
2
3
4
5

REF.NO.56000 SERIES


IC6101
UPD65622G275
(DATA I/F)
IC6102
TC7W14FUTL
(SCHMITT INVERTER)
IC6103
TC7WU04FUTL
(INVERTER)
IC6104
MC74HC245FR2
(BUFFER)
IC6105
MC74HC244FR2
(BUFFER)
IC6106
MC74HC244FR2
(BUFFER)
Q6101
2SJ165
X1
VSX0858
PC CARD CONNECTOR
P59010
LB101
VLP0154
LB103 VLP0175
LB104 VLP0175
R143 47
R146 330
R147 1K
R148 68
R149 10
R101 1M
R102 68
R103 220
R104 22K
R105 22K
R106 22K
R108 22K
R151 22K
R152 22K
R153 22K
R154 22K
R155 22K
R107
R161 0
R162 0
R163 0
R164 0
R165 0
R166 0
R167 0
R168 0
R169 0
R174 0
R170 0
R175 0
R176 0
R172 0
R173 0
R171 0
R177 0
R178 0
R179 0
R180 0
R181 0
R182 0
R183 0
R184 0
C101 0.1
C102 0.1
C103 0.1
C104 0.1
C105 0.1
C106 470P
C107 0.1
C108 0.1
C109 0.1
C127 100P
C128 100P
C130 100P
C131 270P
C129 270P
C132 1
C133 6V100
C151 0.1
C152 6V47
D111 MA141K
D112 MA141WK
D113 MA141WK
D114 MA141WK
D115 MA141WK
D116 MA141WK
D117 MA141WK
D118 MA141WK
D119 MA141WK
D102 MA141A
D103 MA141WA
D104 MA141WA
D105 MA141WA
D106 MA141WA
D107 MA141WA
D108 MA141WA
D109 MA141WA
D110 MA141WA
D120 MA141WK
D121 MA141WA
D122 MA721WA
D123 MA141K
D124 MA740
5V(D)
TO MAIN(3/5)
Page:3-33(D-3)
5V(D) H
D GND I
GND(A) J
TO MAIN(1/5)
Page:3-23(C-1)
ASIC CSA a
TO MAIN(2/5)
Page:3-26(C-13)
CFCD1 K
CFCD2 L
TO MAIN(1/5)
Page:3-24(B-1)
D0 b
D1 c
D2 d
D3 e
D4 f
D5 g
D6 h
D7 i
TO MAIN(2/5)
Page:3-27(C,D-22)
RXDO W
TXDO+ X
SCKO Y
CS3 Z
CSO A
WR B
CFWP C
RD D
WAIT E
CFRDY F
CFRS G
TO MAIN(1/5)
Page:3-24(A-1)
A0 j
A1 k
A2 l
A3 m
A4 n
A5 o
A6 p
A7 q
A8 r
A9 s
A10 t
A11 u
A17 v
TO MAIN(2/5)
Page:3-25(E-16)
M RS
DTCLK
DTCLK B
RXD
TXD M
TXD P
HOSTCLK
GND
VDD
PD1
PD2
PD3
PD4
PD5
PD6
PD7
PD8
XI
XO
CTS
OSCOU
CLK IN
CLK OUT
SYS
D07
D06
D05
D04
RTS
RRDY
RDRF
TDRF
BUSINH
N.C
TEST6
TEST5
TEST4
TEST3
TEST2
TEST1
PC
DEC
D03
D02
D01
D00
RE
WE
RUNCPU
RES
PTRCLK
PTRBUSY
ACKDTREQ
XFLAG
HOSTBUSY
DTAVAIL
ININT
1284ACTV
A00
A01
A02
A03
A04
A05
A06
A12
A13
A14
A15
H
G
F
E
D
C
B
A
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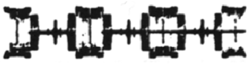
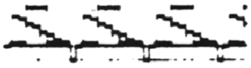
13
14
15
16
17

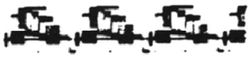
REF.NO.56000 SERIES



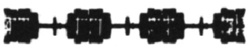
IC201-03
0.5Vp-p 20μs/div



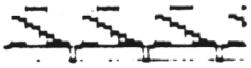
IC201-05
0.5Vp-p 20μs/div



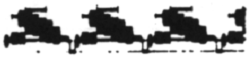
JK53001-13
1.0Vp-p 20μs/div



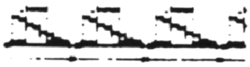
IC601-17
0.4Vp-p 20μs/div



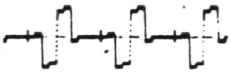
IC601-18
0.4Vp-p 20μs/div



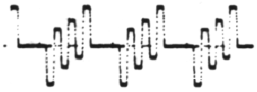
IC601-20
2.0Vp-p 20μs/div



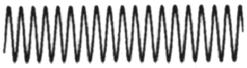
Q606 BASE
1.2Vp-p 20μsec/div



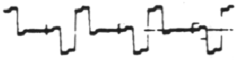
Q609 BASE
0.55Vp-p 20μsec/div



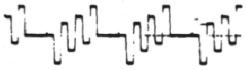
Q610 BASE
0.7Vp-p 20μs/div



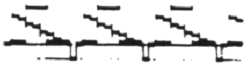
TL53401
0.5Vp-p 0.5μs/div



TL53404
1.2Vp-p 20μs/div



TL53405
1.2Vp-p 20μs/div



TL53407
1.2Vp-p 20μs/div

IC59201 (HG72C012FD) VIDEO MEMORY CONTROL/PRINT I/O CHART

Pin No.	Signal Name	I/O	Function	Pin No.	Signal Name	I/O	Function
1	A (7)	I	Address Bus	41	GMA (4)	O	Video Memory Address
2	A (6)	I	Address Bus	42	GMA (3)	O	Video Memory Address
3	A (5)	I	Address Bus	43	GMA (2)	O	Video Memory Address
4	A (4)	I	Address Bus	44	GMA (1)	O	Video Memory Address
5	A (3)	I	Address Bus	45	GMA (0)	O	Video Memory Address
6	A (2)	I	Address Bus	46	GMD1 (7)	I/O	Video Memory (C) Data
7	A (1)	I	Address Bus	47	GMD1 (6)	I/O	Video Memory (C) Data
8	A (0)	I	Address Bus	48	GMD1 (5)	I/O	Video Memory (C) Data
9	DREQ	O	Video Memory Access Request	49	GMD1 (4)	I/O	Video Memory (C) Data
10	TP2	I	Test Mode Setting	50	GMD1 (3)	I/O	Video Memory (C) Data
11	VCCI	I	Power Source	51	VCCO	I	Power Source
12	GNDI		GND	52	GND0		GND
13	XIN	I	X`tal OSC Input (27MHz)	53	GMD1 (2)	I/O	Video Memory (C) Data
14	XOUT	O	X`tal OSC Output (27MHz)	54	GMD1 (1)	I/O	Video Memory (C) Data
15	RST	I	System Reset	55	GMD1 (0)	I/O	Video Memory (C) Data
16	TP1	I	Test Mode Setting	56	GMD0 (7)	I/O	Video Memory (Y) Data
17	TP0	I	Test Mode Setting	57	GMD0 (6)	I/O	Video Memory (Y) Data
18	MCRDWR	I	Video Memory Access Enable	58	GMD0 (5)	I/O	Video Memory (Y) Data
19	MCCAS	I	Video Memory Access CAS	59	GMD0 (4)	I/O	Video Memory (Y) Data
20	MCRAS	I	Video Memory Access RAS	60	VCCO	I	Power Source
21	MCCLK	O	Clock (6.75MHz)	61	GNDO		GND
22	F675	O	Clock (6.75MHz) for OSD	62	GMD0 (3)	I/O	Video Memory (Y) Data
23	VC1	I	Character Data for OSD	63	GMD0 (2)	I/O	Video Memory (Y) Data
24	BLK1	I	Frame Data for OSD	64	GMD0 (1)	I/O	Video Memory (Y) Data
25	VB	I	Color Data (B) for OSD	65	GMD0 (0)	I/O	Video Memory (Y) Data
26	VG	I	Color Data (G) for OSD	66	ESYNC	O	Composite SYNC Output (For Replaceing)
27	VR	I	Color Data (R) for OSD	67	MSYNC	O	Composite SYNC Output (For Encorder)
28	GMRAS01	O	Video Memory RAS	68	GNDI		GND
29	VCCI	I	Power Source	69	VCCI	I	Power Source
30	GNDI		GND	70	AGND		GND (Analog)
31	GMCAS0	O	Video Memory (Y) CAS	71	AVCC	I	Power Source (Analog)
32	GMCAS1	O	Video Memory (C) CAS	72	DGND		GND (Digital)
33	GMWE0	O	Video Memory (Y) CAS	73	YOUT	O	D/A, Y, Output
34	GMWE1	O	Video Memory (C) WE0	74	DVCC	I	Power Source (Digital)
35	GNDO		GND	75	AGND		GND (Analog)
36	GMA (9)	O	Video Memory Address	76	CBL	I	D/A By-pass Capacitor Pin
37	GMA (8)	O	Video Memory Address	77	ROUT	O	D/A R-Y Output
38	GMA (7)	O	Video Memory Address	78	CBU	O	D/A Phase Compensation Capacitor Pin
39	GMA (6)	O	Video Memory Address	79	BOUT	O	D/A B-Y Output
40	GMA (5)	O	Video Memory Address	80	REXT	O	D/A Reference Resistor Pin

Pin No.	Signal Name	I/O	Function	Pin No.	Signal Name	I/O	Function
81	AVCC	I	Power Source (Analog)	121	PORT (0)	O	MEMORY/EE Select
82	AGND		GND (Analog)	122	HDDT (2)	O	Thermal Head Data
83	VRM	I	A/D Analog Signal Input (3V DC)	123	HDDT (1)	O	Thermal Head Data
84	RIN	I	A/D R-Y Input	124	HDDT (0)	O	Thermal Head Data
85	BIN	I	A/D B-Y Input	125	HEADCK	O	Thermal Head Clock
86	BIAS	I	A/D Internal Bias Setting Pin	126	DG	O	Thermal Head Enable
87	AVCC	I	Power Source (Analog)	127	LATCH	O	Thermal Head Latch
88	AGND		GND (Analog)	128	HSO	O	HD Output
89	DVCCL	I	3V Power Source (Digital)	129	VDIT	O	VD Output
90	DGND		GND (Digital)	130	FSEL	O	Field Detection (ODD:H)
91	DVCCL	I	3V Power Source (Digital)	131	VCCI	I	Power Source
92	AVCC	I	Power Source (Analog)	132	GNDI		GND
93	YIN	I	A/D Y Input	133	VALARM	O	V Sync Lack Flag (Lack:H)
94	AGND		GND (Analog)	134	PRBSY	O	Print Busy (Busy:H)
95	AVCCL	I	3V Power Source (Analog)	135	D (0)	I/O	Data Bus
96	VRB	I	A/D Reference Voltage Pin (2.0V)	136	D (1)	I/O	Data Bus
97	VR2	O	A/D Reference Voltage	137	D (2)	I/O	Data Bus
98	AVCCL	I	3V Power Source (Analog)	138	D (3)	I/O	Data Bus
99	VR1	O	A/D Reference Voltage	139	VCCO	I	Power Source
100	VRT	I	A/D Reference Voltage Input (4.0V)	140	GNDO		GND
101	AVCCL	I	3V Power Source (Analog)	141	D (4)	I/O	Data Bus
102	AGND		GND (Analog)	142	D (5)	I/O	Data Bus
103	CSIN	I	Composite Sync Input	143	D (6)	I/O	Data Bus
104	HSYNC	I	HD Input	144	D (7)	I/O	Data Bus
105	HAFC	I	AFC Input (NTSC:L)	145	CSB	I	Chip Select
106	DCBLK	O	Blanking Pulse for Decoder	146	FSC	O	SYNC GENE FSC Output
107	YCLMP	O	Y Clamp Pulse	147	GNDO		GND
108	CCLMP	O	Color Difference Clamp Pulse	148	TP4	I	Test Mode Setting
109	VCCO	I	Power Source	149	VCCO	I	Power Source
110	GNDO		GND	150	GNDO		GND
111	MPX	O	Color Difference Multiplex Pulse	151	SXOUT	O	X`tal OSC Output (4fsc)
112	PORT (7)	O	Error LED	152	SXIN	I	X`tal OSC Input (4fsc)
113	PORT (6)	O	Print LED	153	GNDI		GND
114	PORT (5)	I/O	Extension Port	154	TP3	I	Test Mode Setting
115	PORT (4)	I/O	Extension Port	155	CSA	I	Chip Select
116	VCCO	I	Power Source	156	WR	I	Read
117	GNDO		GND	157	RD	I	Wire
118	PORT (3)	I	Normal/Wide Detection	158	A (10)	I	Address Bus
119	PORT (2)	I	ODD/EVEN Select	159	A (9)	I	Address Bus
120	PORT (1)	O	Video Output Mute	160	A (8)	I	Address Bus

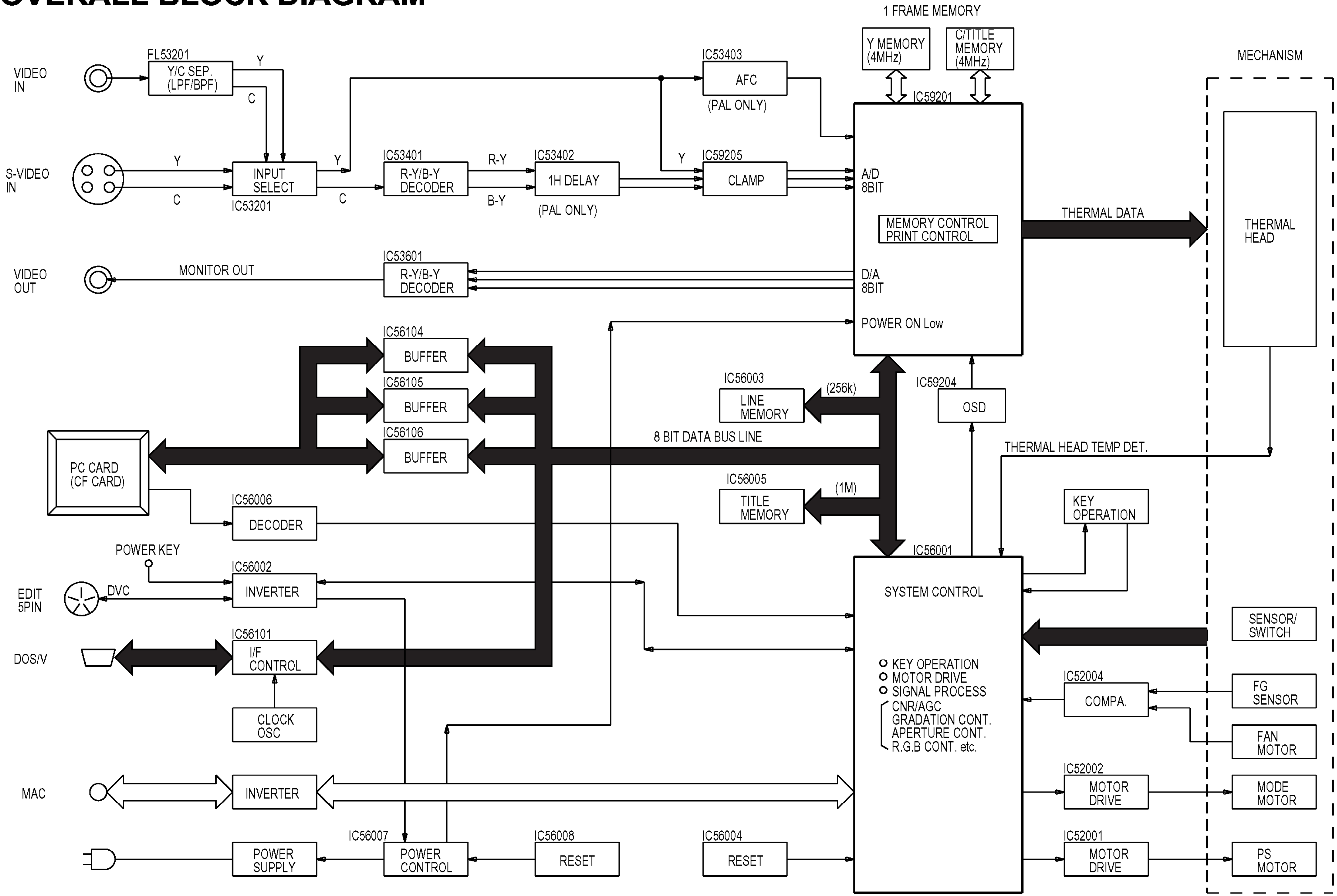
IC56001(HD37042AE30F) SYSTEM CONTROL I/O CHART

Pin No.	Signal Name	I/O	Function	Pin No.	Signal Name	I/O	Function
1	PE14/KEY_IN12	I	Key Input 2	57	PD11/CAS_SW	I	Paper Cassette Switch
2	PE15/KEY_IN3	I	Key Input 3	58	PD10/MOD0	I	Mode Detection Switch
3	VSS	-	GND	59	PD9/HDM1	O	Mode Motor Drive
4	PC0 (A0)/A0	O	Address Bus	60	PD8/HDM0	O	Mode Motor Drive
5	PC0 (A1)/A1	O	Address Bus	61	VSS	-	GND
6	PC0 (A2)/A2	O	Address Bus	62	PD7 (D7)/D7	I/O	Data Bus
7	PC0 (A3)/A3	O	Address Bus	63	PD6 (D6)/D6	I/O	Data Bus
8	PC0 (A4)/A4	O	Address Bus	64	PD0 (D0)/D0	I/O	Data Bus
9	PC0 (A5)/A5	O	Address Bus	65	VCC	I	Power Source
10	PC0 (A6)/A6	O	Address Bus	66	PD4 (D4)/D4	I/O	Data Bus
11	PC0 (A7)/A7	O	Address Bus	67	PD4 (D3)/D3	I/O	Data Bus
12	PC0 (A8)/A8	O	Address Bus	68	PD4 (D2)/D2	I/O	Data Bus
13	PC0 (A9)/A9	O	Address Bus	69	PD4 (D1)/D1	I/O	Data Bus
14	PC0 (A10)/A10	O	Address Bus	70	PD4 (D0)/D0	I/O	Data Bus
15	PC0 (A11)/A11	O	Address Bus	71	VSS	-	GND
16	PC0 (A12)/A12	O	Address Bus	72	XTAL	I	X`tal OSC In
17	PC0 (A13)/A13	O	Address Bus	73	MD3		
18	PC0 (A14)/A14	O	Address Bus	74	EXTAL	O	X`tal OSC Out
19	PC0 (A15)/A15	O	Address Bus	75	MD2		
20	PB0 (A16/A16	O	Address Bus	76	NMI		
21	VCC	I	Power Source	77	VCC	I	Power Source
22	PB1 (A17/A17)	O	Address Bus	78	MD1		
23	VSS	-	GND	79	MD0		
24	PB2 (RAS)/RAS	O	RAS (DRAM)	80	PLL VCC	I	PLL Power Source
25	PB3 (CASL)/CAS	O	CAS (DRAM)	81	PLL CAP		PLL Capacitor Pin
26	PB4/CFRST	O	RESET (CF)	82	PLL VSS	-	PLL Power Source
27	VSS	-	GND	83	PA15/RST_OUT	O	Reset Output
28	PB5 (RDWR)/RDWR	O	WE (DRAM)	84	RES	I	RESET
29	PB6 (IRQ4)/CFCD	I	Equipment Detection (CF)	85	PE0/DCM_CTL	O	PS Motor Control
30	PB7/CFRDY	I	Ready (CF)	86	PE1/DCM0	O	PS Motor Drive
31	PB8 (WAIT)/WAIT	I	Wait (CF)	87	PE2/DCM1	O	PS Motor Drive 00: OFF, 01: Reverse, 10: Forward
32	PB9 (IRQ)/REMOTE	I	Remote Control Data Input	88	PE3/PEND	I	Paper Ebd Detection Switch
33	VSS	-	GND	89	PE4/FG	I	FG (PS Motor)
34	PA14 (RD)/RD	O	Read (Bus Control)	90	VSS	-	GND
35	WDTOVF	-	Not Used	91	PF0/TEMP	I	Temprature Detection Sensor
36	PA13/CFWP	I	Write Protect (CF)	92	PF1/PCHK	I	Paper Check Sensor
37	VCC	I	Power Source	93	PF2/MOD1	I	Mode Sensor 1
38	Pa12 (WR)/WR	O	Write (Bus Control)	94	PF3/POUT	I	Paper Out Sensor
39	VSS	-	GND	95	PF4/SHT	I	Sheet Sensor
40	PA11 (CS1)/CS1	O	CS for Head Control Line Memory	96	PF5/CAS0	I	Cassette Detection 0
41	PA10 (CS0/CS0	O	CS for Memory Control/IF Control IC	97	AVSS	-	Analog GND
42	PA9 (IRQ3)DREQ	I	DRAM Access Request	98	PF6/CAD1	I	Cassette Detection 1
43	PA8 (IRQ2)/PRBSY	I	Print Busy	99	PF7/CAD2	I	Cassette Detection 2
44	PA7 (CS3)/CS3	O	CF Card/CS for ROM	100	AVSS	I	Analog Power Source
45	PA6 (CS2)/CS2	O	CS for SRAM	101	VSS	-	GND
46	PA5 (SCK1)/SCK1	I	Serial Clock (DVC)	102	PE5/FAN	O	Fan Motor Drive (ON: H)
47	PA4 (TXD1)/TXD1	O	Serial Transmission Data (DVC)	103	VCC	I	Power Source
48	PA3 (RXD1)/RXD1	I	Serial Receive Data (DVC)	104	PE6/FANV	I	Fan Motor Lock Detection (Lock: H)
49	PA2 (SCK0)/SCK0	O	Serial Clock (Mac)	105	PE7/KEY_SO	O	Key Scan 0
50	PA1 (TXD0)/TXD0	O	Serial Transmission Data (Mac)	106	PE8/KEY_SO	O	Key Scan 1
51	PA0 (RXD0)/RXD0	I	Serial Receive Data (Mac)	107	PE9/KEY_SO	O	Key Scan 2
52	RD15/OSD_CLK	O	OSD Serial Clock	108	PE10/KEY_SO	O	Key Scan 3
53	PD14/OSD_DT	O	OSD Data	109	VSS	-	GND
54	PD13/OSD_CS	O	OSD Chip Select	110	PE11/KEY_S4	O	Key Scan 4
55	VSS	-	GND	111	PE12/KEY_IN0	I	Key Input 0
56	PD12/CRT_SW	I	Ink Cassette Detection Switch	112	PE13/Key_IN1	I	Key Input 1

IC56101 (PD6522G275 DATA INTERFACE I/O CHART

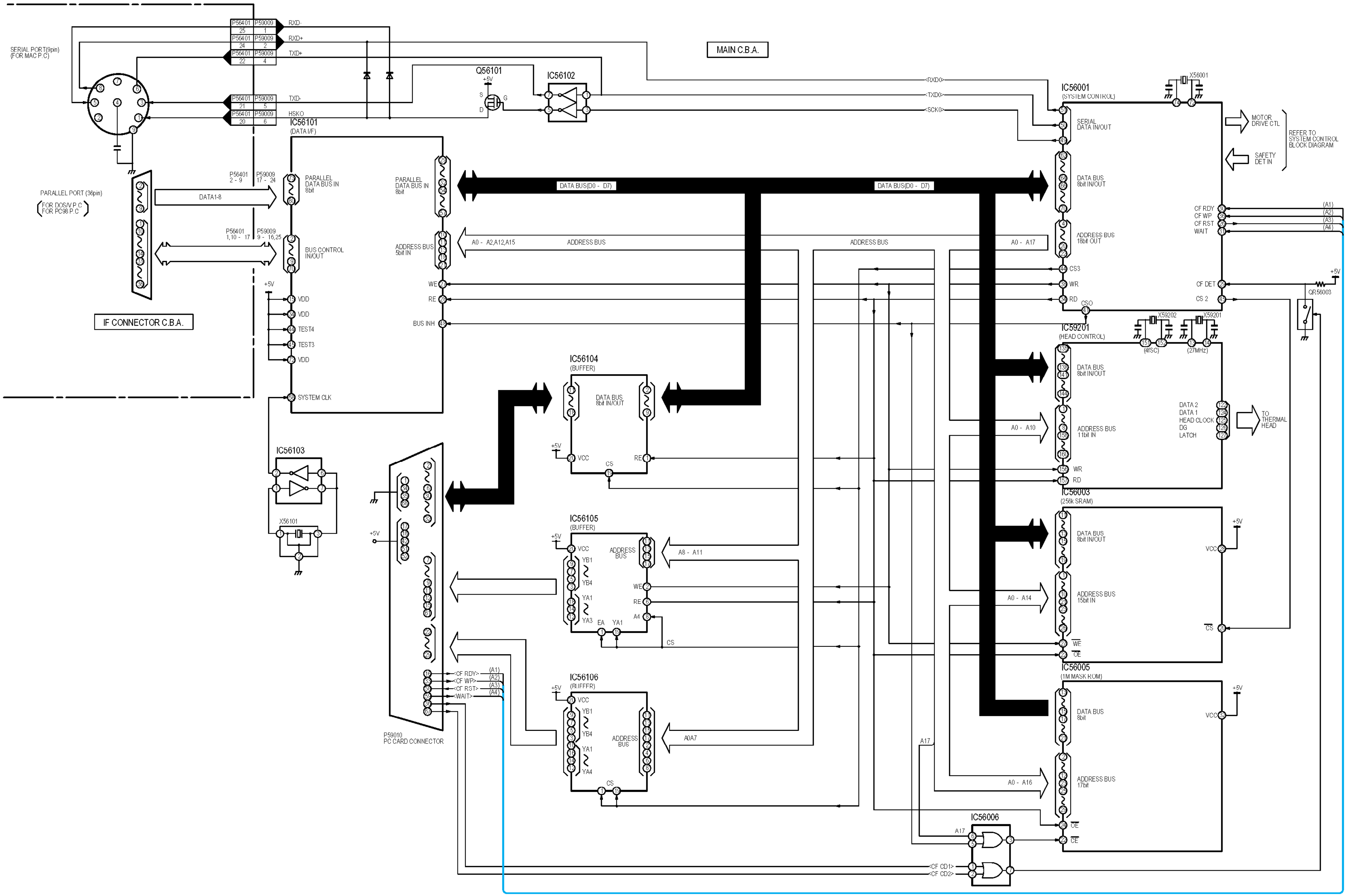
Pin No.	Signal Name	I/O	Function	Pin No.	Signal Name	I/O	Function
1	GND	I	GND	41	TEST 1	I	Test Pin
2	PTRCK	O	Used for Two Way Communication	42	TEST 2	I	Test Pin
3	PTRBUSY	O	Used for Two Way Communication	43	TEST 3	I	Test Pin
4	ACKDTREQ	O	Used for Two Way Communication	44	TEST 4	I	Test Pin
5	XFLAG	O	Used for Two Way Communication	45	TEST 5	I	Test Pin
6	HOSTBUSY	I	Used for Two Way Communication	46	TEST 6	I	Test Pin
7	DTAVAIL	O	Used for Two Way Communication	47	N.C		No Connection
8	INIT	I	Used for Two Way Communication	48	BUSINH	I	Bus Inhibit
9	1284ACTV	I	Used for Two Way Communication	49	TDRF	O	Transmission Register Empty
10	A00	I	Address Data	50	RDRF	O	Receive Register Full
11	A01	I	Address Data	51	RRDY	O	Parallel Receive Ready
12	GND		GND	52	RTS	O	Serial Transmission Request
13	A02	I	Address Data	53	GND		GND
14	A03	I	Address Data	54	D04	I/O	Data Bus
15	A04	I	Address Data	55	D05	I/O	Data Bus
16	A05	I	Address Data	56	D06	I/O	Data Bus
17	A06	I	Address Data	57	D07	I/O	Data Bus
18	A12	I	Address Data	58	SYS	I	System Clock Output
19	A13	I	Address Data	59	CLKOUT	O	Clock Dividing Output
20	A14	I	Address Data	60	CLKIN	I	Clock Dividing Input
21	A15	I	Address Data	61	OSCOUT	I	Oscillation Output
22	GND		GND	62	CTS	I	Serial Data Transmission Control
23	N.C		No Connection	63	XO	O	Oscillation Output
24	N.C		No Connection	64	XI	I	Oscillation Input
25	RES	I	RESET	65	DTCLK	O	Serial Data Clock
26	RUNCPU	O	CPU Interruption	66	DTCKB	O	DTCLK Reverse Output
27	WF	I	Write	67	RXD	I	Serial Receive Data
28	RE	I	Read	68	TXDM	O	TXDP Reverse Output
29	D00	I/O	Data Bus	69	TXDP	O	Serial Transmission Data
30	D01	I/O	Data Bus	70	HOSTCLK	I	Data Clock
31	D02	I/O	Data Bus	71	GND		GND
32	D03	I/O	Data Bus	72	VDD		Power Source
33	GND		GND	73	PD1	I	Parallel Data Input
34	VDD	I	+5V	74	PD2	I	Parallel Data Input
35	N.C		No Connection	75	PD3	I	Parallel Data Input
36	N.C		No Connection	76	PD4	I	Parallel Data Input
37	N.C		No Connection	77	PD5	I	Parallel Data Input
38	N.C		No Connection	78	PD6	I	Parallel Data Input
39	N.C		No Connection	79	PD7	I	Parallel Data Input
40	PCDEC	O	PC Enable	80	PD8	I	Parallel Data Input

OVERALL BLOCK DIAGRAM

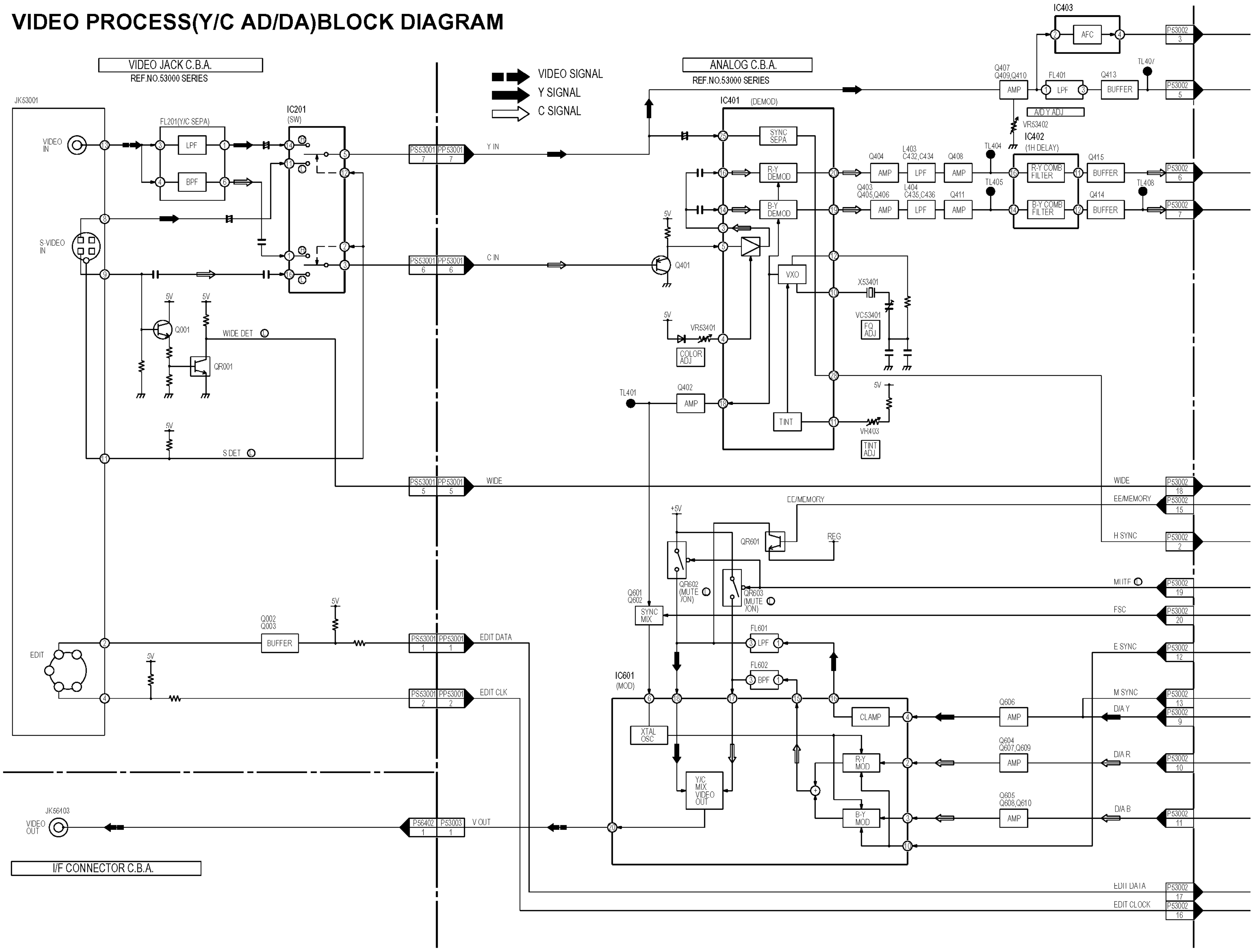


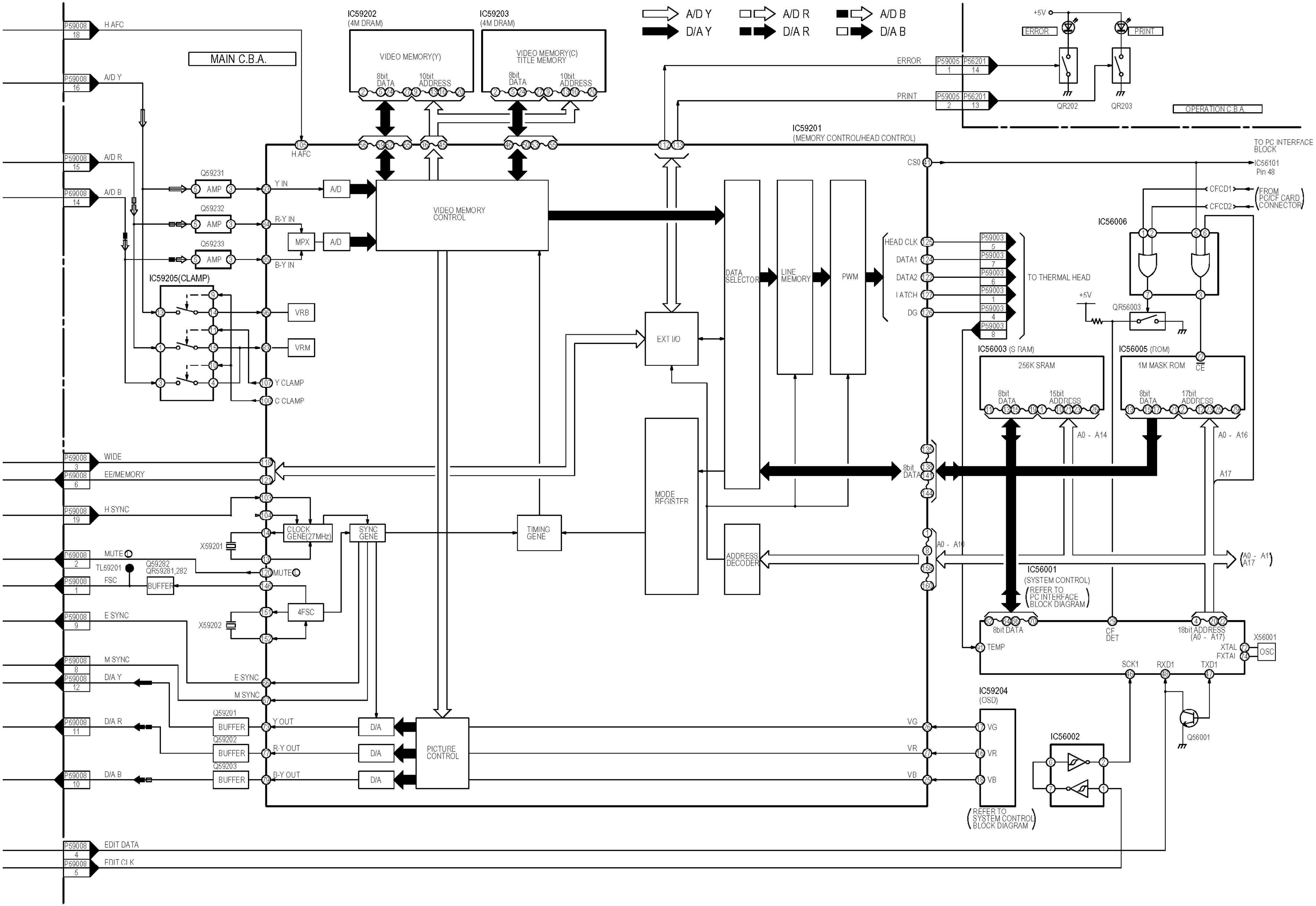
1 FRAME MEMORY
Y MEMORY (4MHz)
C/TITLE MEMORY (4MHz)
MECHANISM
VIDEO IN
FL53201
Y/C SEP. (LPF/BPF)
Y
C
IC53403
AFC
(PAL ONLY)
IC59201
S-VIDEO IN
Y
C
INPUT SELECT
IC53201
Y
C
IC53401
R-Y/B-Y DECODER
R-Y
B-Y
IC53402
1H DELAY
(PAL ONLY)
Y
IC59205
CLAMP
A/D 8BIT
MEMORY CONTROL PRINT CONTROL
THERMAL DATA
THERMAL HEAD
VIDEO OUT
MONITOR OUT
IC53601
R-Y/B-Y DECODER
D/A 8BIT
POWER ON Low
IC56104
BUFFER
IC56105
BUFFER
IC56106
BUFFER
IC56003
LINE MEMORY
(256k)
IC59204
OSD
8 BIT DATA BUS LINE
THERMAL HEAD TEMP DET.
PC CARD (CF CARD)
IC56005
TITLE MEMORY
(1M)
IC56006
DECODER
KEY OPERATION
POWER KEY
IC56001
IC56002
INVERTER
EDIT 5PIN
DVC
SYSTEM CONTROL
SENSOR/ SWITCH
IC56101
DOS/V
I/F CONTROL
KEY OPERATION
MOTOR DRIVE
SIGNAL PROCESS
CNR/AGC
GRADATION CONT.
APERTURE CONT.
R.G.B CONT. etc.
IC52004
COMPA.
FG SENSOR
CLOCK OSC
FAN MOTOR
MAC
INVERTER
IC52002
MOTOR DRIVE
MODE MOTOR
IC56007
IC56008
IC56004
IC52001
POWER SUPPLY
POWER CONTROL
RESET
RESET
MOTOR DRIVE
PS MOTOR

PC INTERFACE BLOCK DIAGRAM

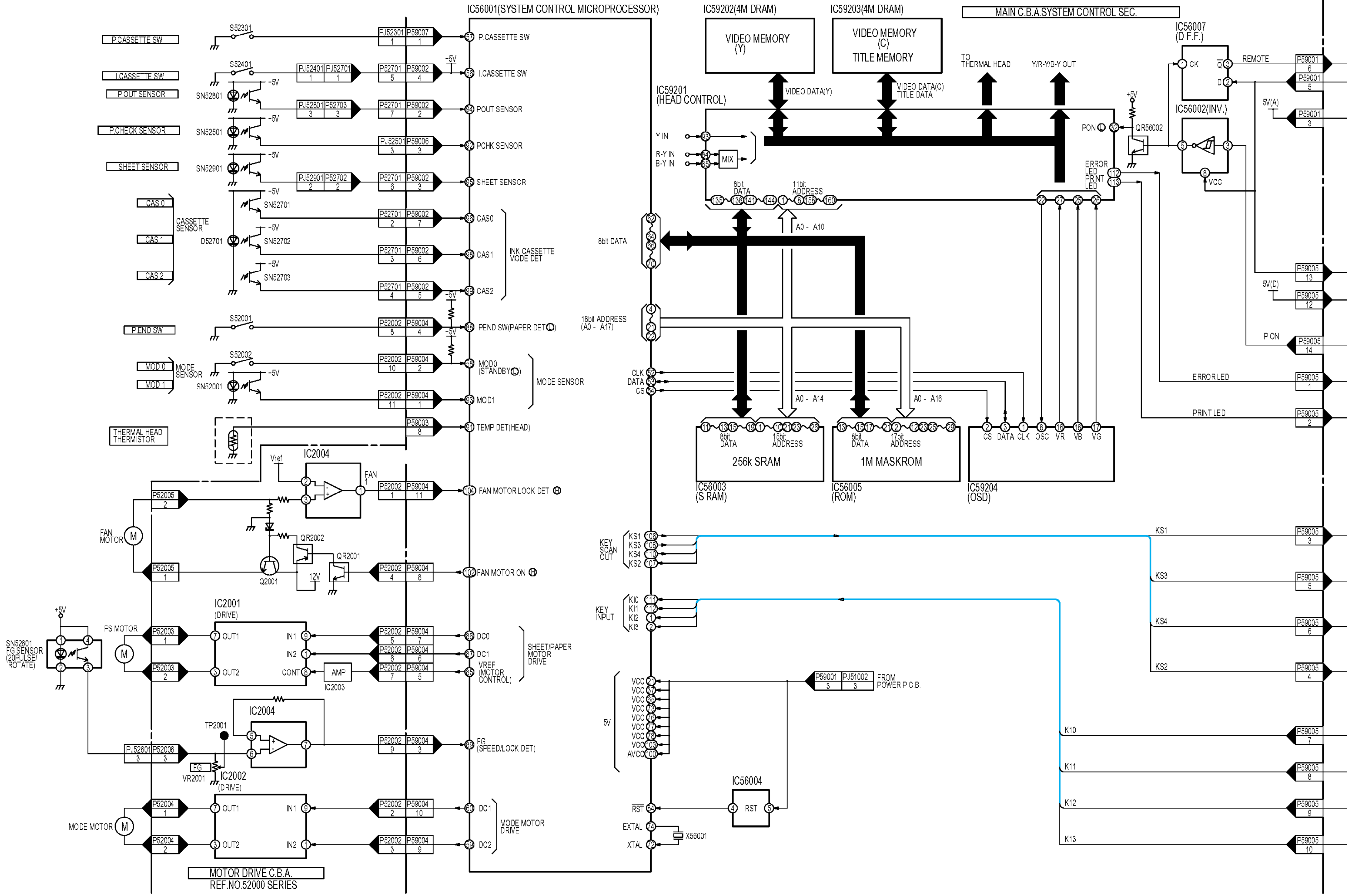

SERIAL PORT(9pin) (FOR MAC P.C)
P56401 P59009 25 1 RXD-
P56401 P59009 24 2 RXD+
P56401 P59009 22 4 TXD+
P56401 P59009 21 5 TXD-
P56401 P59009 20 6 HSKO
MAIN C.B.A.
Q56101
+5V
S
G
D
IC56102
PARALLEL PORT (36pin)
FOR DOS/V P.C
FOR PC98 P.C
P56401 2 - 9
P59009 17 - 24
DATA1-8
P56401 1,10 - 17
P59009 9 - 16,25
IF CONNECTOR C.B.A.
IC56101
(DATA I/F)
PARALLEL DATA BUS IN 8bit
BUS CONTROL IN/OUT
PARALLEL DATA BUS IN 8bit
ADDRESS BUS 5bit IN
WE
RE
BUS INH
+5V
VDD
VDD
TEST4
TEST3
VDD
SYSTEM CLK
DATA BUS(D0 - D7)
DATA BUS(D0 - D7)
A0 - A2,A12,A15
ADDRESS BUS
ADDRESS BUS
A0 - A17
<RXD0>
<TXD0>
<SCK0>
IC56001
(SYSTEM CONTROL)
X56001
SERIAL DATA IN/OUT
DATA BUS 8bit IN/OUT
ADDRESS BUS 18bit OUT
CS3
WR
RD
CSO
CF RDY
CF WP
CF RST
WAIT
(A1)
(A2)
(A3)
(A4)
CF DET
CS 2
+5V
QR56003
MOTOR DRIVE CTL
SAFETY DET IN
REFER TO SYSTEM CONTROL BLOCK DIAGRAM
IC59201
(HEAD CONTROL)
X59202
X59201
(4fSC)
(27MHz)
DATA BUS 8bit IN/OUT
A0 - A10
ADDRESS BUS 11bit IN
WR
RD
DATA 2
DATA 1
HEAD CLOCK
DG
LATCH
TO THERMAL HEAD
IC56104
(BUFFER)
DATA BUS 8bit IN/OUT
+5V
VCC
CS
RE
IC56103
X56101
IC56105
(BUFFER)
+5V
VCC
ADDRESS BUS
YB1
YB4
YA1
YA3
EA
YA1
WE
RE
A4
CS
A8 - A11
IC56003
(256k SRAM)
DATA BUS 8bit IN/OUT
A0 - A14
ADDRESS BUS 15bit IN
+5V
VCC
CS
WE
OE
+5V
<CF RDY>
<CF WP>
<CF RST>
<WAIT>
(A1)
(A2)
(A3)
(A4)
P59010
PC CARD CONNECTOR
IC56106
(BUFFER)
+5V
VCC
YB1
YB4
YA1
YA4
ADDRESS BUS
CS
A0A7
IC56005
(1M MASK ROM)
DATA BUS 8bit
+5V
VCC
A17
A0 - A16
ADDRESS BUS 17bit
OE
CE
IC56006
A17
<CF CD1>
<CF CD2>

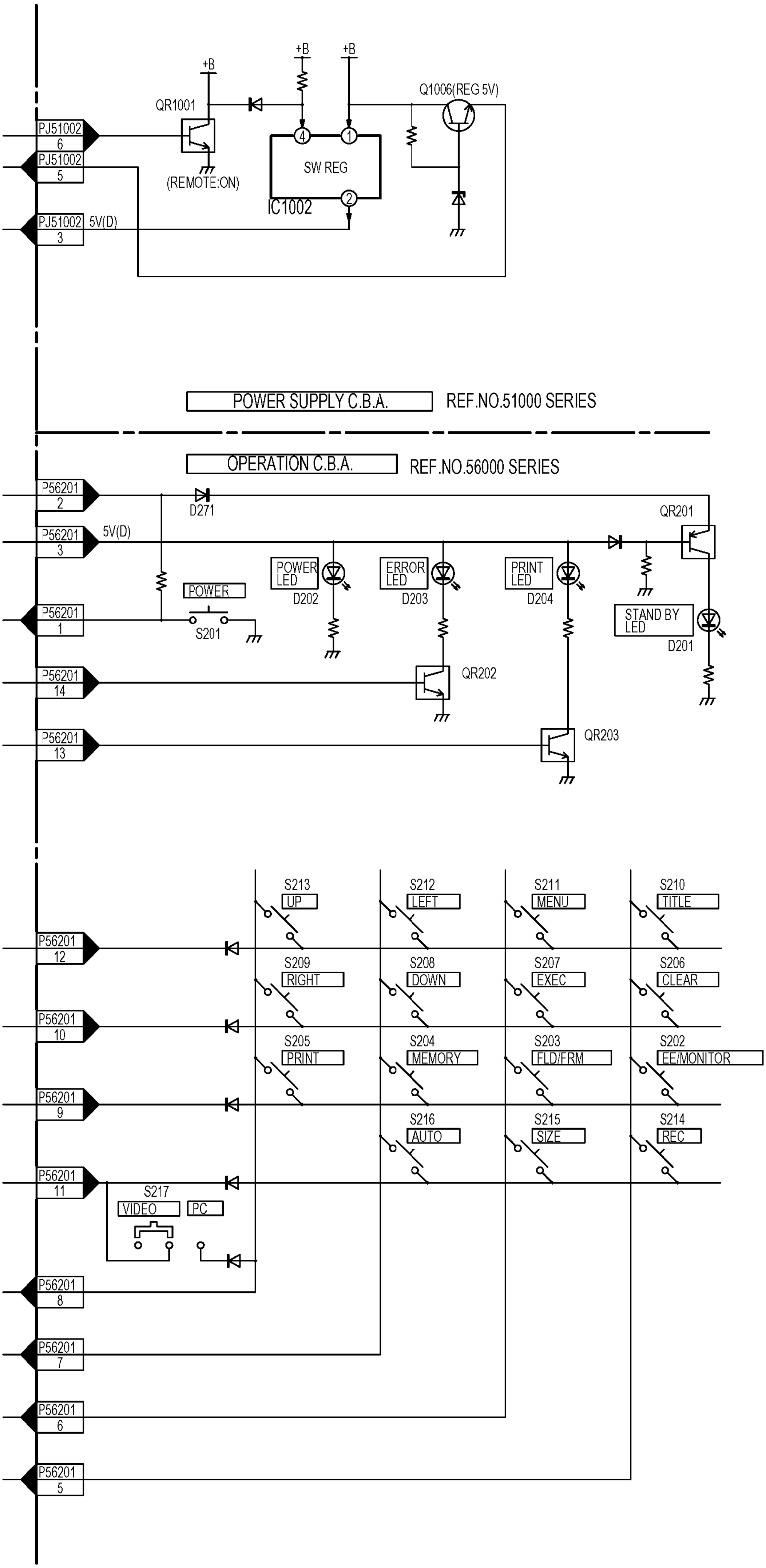
VIDEO PROCESS(Y/C AD/DA)BLOCK DIAGRAM

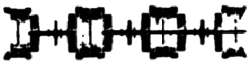
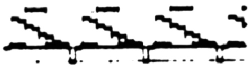
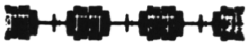
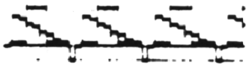
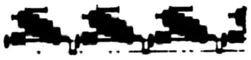
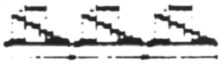
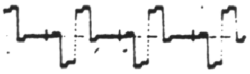
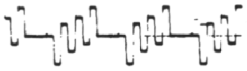
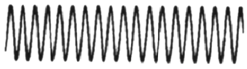
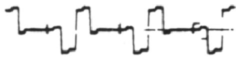
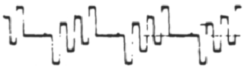
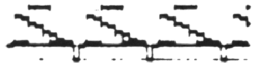
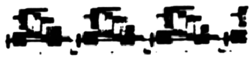

VIDEO JACK C.B.A.
REF.NO.53000 SERIES
ANALOG C.B.A.
REF.NO.53000 SERIES
I/F CONNECTOR C.B.A.
VIDEO SIGNAL
Y SIGNAL
C SIGNAL
JK53001
VIDEO IN
S-VIDEO IN
EDIT
FL201(Y/C SEPA)
LPF
BPF
IC201 (SW)
Q001
QR001
WIDE DET
S DET
5V
Q002 Q003
BUFFER
PS53001
PP53001
Y IN
C IN
WIDE
EDIT DATA
EDIT CLK
JK56403
VIDEO OUT
P56402
P53003
V OUT
IC401 (DEMOD)
SYNC SEPA
R-Y DEMOD
B-Y DEMOD
VXO
TINT
Q401
VR53401
COLOR ADJ
X53401
VC53401
FQ ADJ
VR403
TINT ADJ
TL401
Q402
AMP
Q404
L403 C432,C434
Q408
LPF
Q403 Q405,Q406
L404 C435,C436
Q411
TL404
TL405
IC402 (1H DELAY)
R-Y COMB FILTER
B-Y COMB FILTER
Q415
Q414
BUFFER
TL408
IC403
AFC
Q407 Q409,Q410
FL401
Q413
TL407
A/D Y ADJ
VR53402
P53002
WIDE
EE/MEMORY
H SYNC
MUTE
FSC
E SYNC
M SYNC
D/A Y
D/A R
D/A B
EDIT DATA
EDIT CLOCK
+5V
QR601
REG
QR602 (MUTE /ON)
QR603 (MUTE /ON)
Q601 Q602
SYNC MIX
FL601
FL602
IC601 (MOD)
XTAL OSC
Y/C MIX VIDEO OUT
CLAMP
R-Y MOD
B-Y MOD
Q606
Q604 Q607,Q609
Q605 Q608,Q610


A/D Y
D/A Y
A/D R
D/A R
A/D B
D/A B
MAIN C.B.A.
OPERATION C.B.A
IC59202 (4M DRAM)
VIDEO MEMORY(Y)
IC59203 (4M DRAM)
VIDEO MEMORY(C) TITLE MEMORY
8bit DATA
10bit ADDRESS
IC59201 (MEMORY CONTROL/HEAD CONTROL)
P59008 18 H AFC
P59008 16 A/D Y
P59008 15 A/D R
P59008 14 A/D B
H AFC
Q59231 AMP
Q59232 AMP
Q59233 AMP
Y IN
R-Y IN
B-Y IN
A/D
MPX
VIDEO MEMORY CONTROL
IC59205(CLAMP)
VRB
VRM
Y CLAMP
C CLAMP
DATA SELECTOR
LINE MEMORY
PWM
EXT I/O
MODE REGISTER
ADDRESS DECODER
TIMING GENE
CLOCK GENE(27MHz)
SYNC GENE
4FSC
X59201
X59202
P59008 3 WIDE
P59008 6 EE/MEMORY
P59008 19 H SYNC
P59008 2 MUTE L
TL59201
Q59282 QR59281,282
P59008 1 FSC
BUFFER
MUTE L
P59008 9 E SYNC
P59008 8 M SYNC
P59008 12 D/A Y
P59008 11 D/A R
P59008 10 D/A B
E SYNC
M SYNC
Q59201 BUFFER
Q59202 BUFFER
Q59203 BUFFER
Y OUT
R-Y OUT
B-Y OUT
D/A
PICTURE CONTROL
VG
VR
VB
IC59204 (OSD)
(REFER TO SYSTEM CONTROL BLOCK DIAGRAM)
IC56002
P59008 4 EDIT DATA
P59008 5 EDIT CLK
ERROR
PRINT
P59005 1 P56201 14
P59005 2 P56201 13
+5V
QR202
QR203
CS0
TO PC INTERFACE BLOCK
IC56101 Pin 48
CFCD1
CFCD2
(FROM PC/CF CARD CONNECTOR)
IC56006
HEAD CLK
DATA1
DATA2
LATCH
DG
P59003 5
P59003 7
P59003 6
P59003 1
P59003 4
P59003 8
TO THERMAL HEAD
QR56003
IC56003 (S RAM)
256K SRAM
8bit DATA
15bit ADDRESS
A0 - A14
IC56005 (ROM)
1M MASK ROM
CE
17bit ADDRESS
A0 - A16
A17
8bit DATA
A0 - A10
(A0 - A1, A17)
IC56001 (SYSTEM CONTROL)
(REFER TO PC INTERFACE BLOCK DIAGRAM)
8bit DATA
TEMP
CF DET
18bit ADDRESS (A0 - A17)
X56001
XTAL
EXTAL
OSC
SCK1
RXD1
TXD1
Q56001

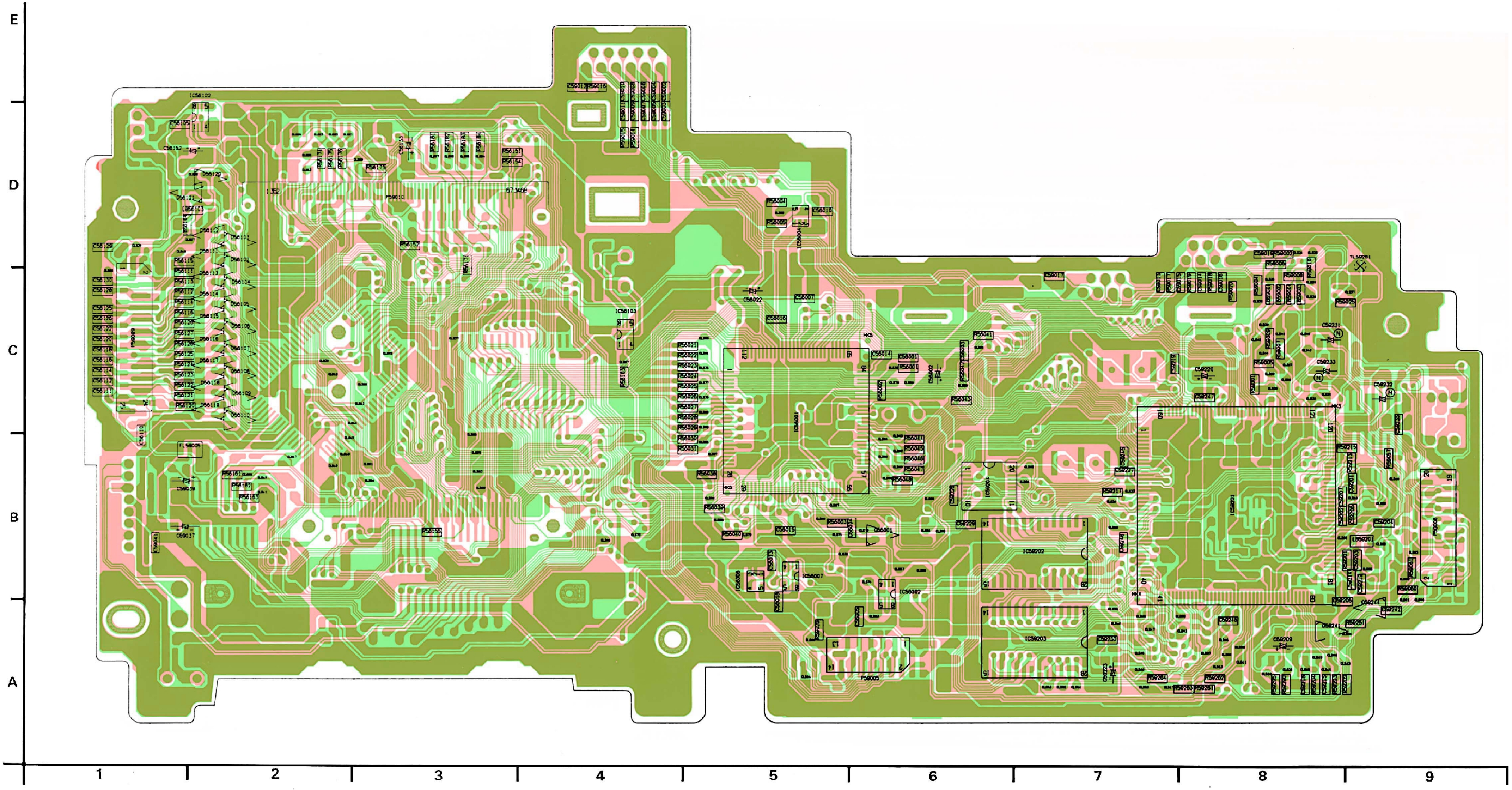
SYSTEM CONTROL SECTION(MAIN C.B.A.)BLOCK DIAGRAM


IC56001(SYSTEM CONTROL MICROPROCESSOR)
IC59202(4M DRAM)
VIDEO MEMORY (Y)
IC59203(4M DRAM)
VIDEO MEMORY (C)
TITLE MEMORY
MAIN C.B.A.SYSTEM CONTROL SEC.
IC56007 (D F.F.)
IC56002(INV.)
REMOTE
P59001
5V(A)
5V(D)
P ON
ERROR LED
PRINT LED
P59005
TO THERMAL HEAD
Y/R-Y/B-Y OUT
VIDEO DATA(Y)
VIDEO DATA(C) TITLE DATA
IC59201 (HEAD CONTROL)
Y IN
R-Y IN
B-Y IN
MIX
8bit DATA
11bit ADDRESS
A0 - A10
PON
QR56002
ERROR LED
PRINT LED
VCC
CK
D
8bit DATA
18bit ADDRESS (A0 - A17)
CLK
DATA
CS
A0 - A14
A0 - A16
256k SRAM
IC56003 (S RAM)
15bit ADDRESS
1M MASKROM
IC56005 (ROM)
17bit ADDRESS
IC59204 (OSD)
CS DATA CLK OSC VR VB VG
KEY SCAN OUT
KS1 KS3 KS4 KS2
KEY INPUT
KI0 KI1 KI2 KI3
K10 K11 K12 K13
5V
VCC
AVCC
P59001 PJ51002
FROM POWER P.C.B.
IC56004
RST
EXTAL
XTAL
X56001
P.CASSETTE SW
S52301
PJ52301 P59007
I.CASSETTE SW
S52401
PJ52401 PJ52701
P52701 P59002
P.OUT SENSOR
SN52801
POUT SENSOR
PJ52801 PJ52703
P.CHECK SENSOR
SN52501
PCHK SENSOR
PJ52501 P59006
SHEET SENSOR
SN52901
PJ52901 PJ52702
CAS 0
CAS 1
CAS 2
CASSETTE SENSOR
D52701
SN52701
SN52702
SN52703
INK CASSETTE MODE DET
+5V
P.END SW
S52001
P52002 P59004
PEND SW(PAPER DET)
MOD 0
MOD 1
MODE SENSOR
S52002
SN52001
MOD0 (STANDBY)
MOD1
THERMAL HEAD THERMISTOR
P59003
TEMP DET(HEAD)
IC2004
Vref
FAN
P52005
FAN MOTOR
FAN MOTOR LOCK DET
QR2002
QR2001
Q2001
12V
FAN MOTOR ON
IC2001 (DRIVE)
PS MOTOR
SN52601 FG SENSOR (20PULSE/ROTATE)
P52003
OUT1 OUT2 IN1 IN2 CONT
AMP
IC2003
DC0
DC1
VREF (MOTOR CONTROL)
SHEET/PAPER MOTOR DRIVE
TP2001
PJ52601 P52006
FG
VR2001
IC2002 (DRIVE)
FG (SPEED/LOCK DET)
MODE MOTOR
P52004
DC1
DC2
MODE MOTOR DRIVE
MOTOR DRIVE C.B.A.
REF.NO.52000 SERIES

+B
+B
+B
QR1001
(REMOTE:ON)
Q1006(REG 5V)
SW REG
IC1002
PJ51002 6
PJ51002 5
PJ51002 3
5V(D)
POWER SUPPLY C.B.A.
REF.NO.51000 SERIES
OPERATION C.B.A.
REF.NO.56000 SERIES
P56201 2
D271
P56201 3
5V(D)
QR201
POWER
S201
P56201 1
POWER LED
D202
ERROR LED
D203
PRINT LED
D204
STAND BY LED
D201
P56201 14
QR202
P56201 13
QR203
S213
UP
S212
LEFT
S211
MENU
S210
TITLE
S209
RIGHT
S208
DOWN
S207
EXEC
S206
CLEAR
S205
PRINT
S204
MEMORY
S203
FLD/FRM
S202
EE/MONITOR
S216
AUTO
S215
SIZE
S214
REC
S217
VIDEO
PC
P56201 12
P56201 10
P56201 9
P56201 11
P56201 8
P56201 7
P56201 6
P56201 5

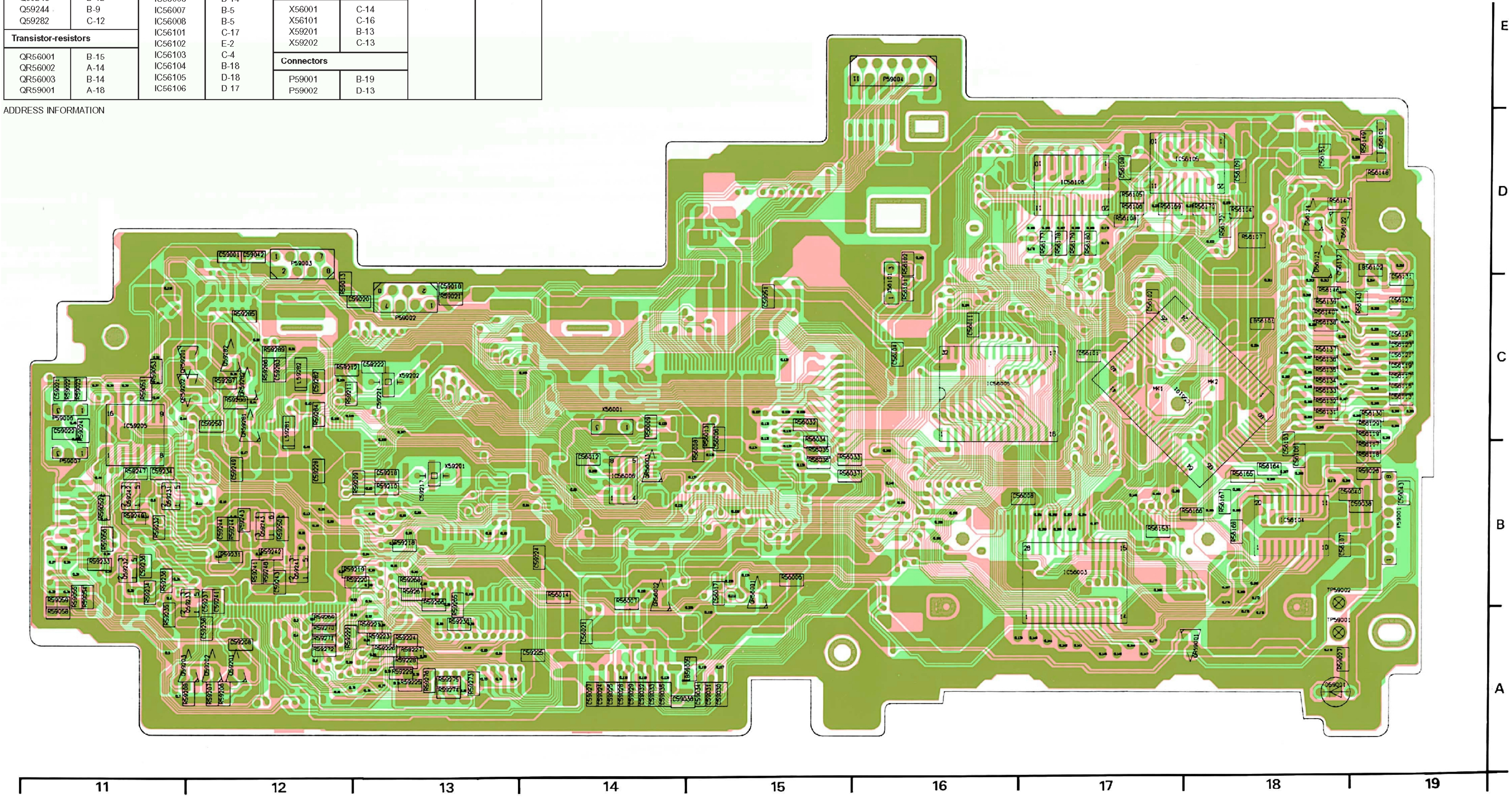
 IC201-03 0.5Vp-p 20µs/div	 IC201-05 0.5Vp-p 20µs/div	 IC601-17 0.4Vp-p 20µs/div	 IC601-18 0.5Vp-p 20µs/div
 IC601-20 2.0Vp-p 20µs/div			
 Q606 BASE 1.2Vp-p 20µs/div	 Q609 BASE 0.55Vp-p 20µs/div	 Q610 BASE 0.7Vp-p 20µs/div	
 TL53401 0.5Vp-p 0.5µs/div	 TL53404 1.2Vp-p 20µs/div	 TL53405 1.3Vp-p 20µs/div	 TL53407 1.2Vp-p 20µs/div
 JK53001-13 1.0Vp-p 20µs/div			

MAIN C.B.A. (VEP96532A)

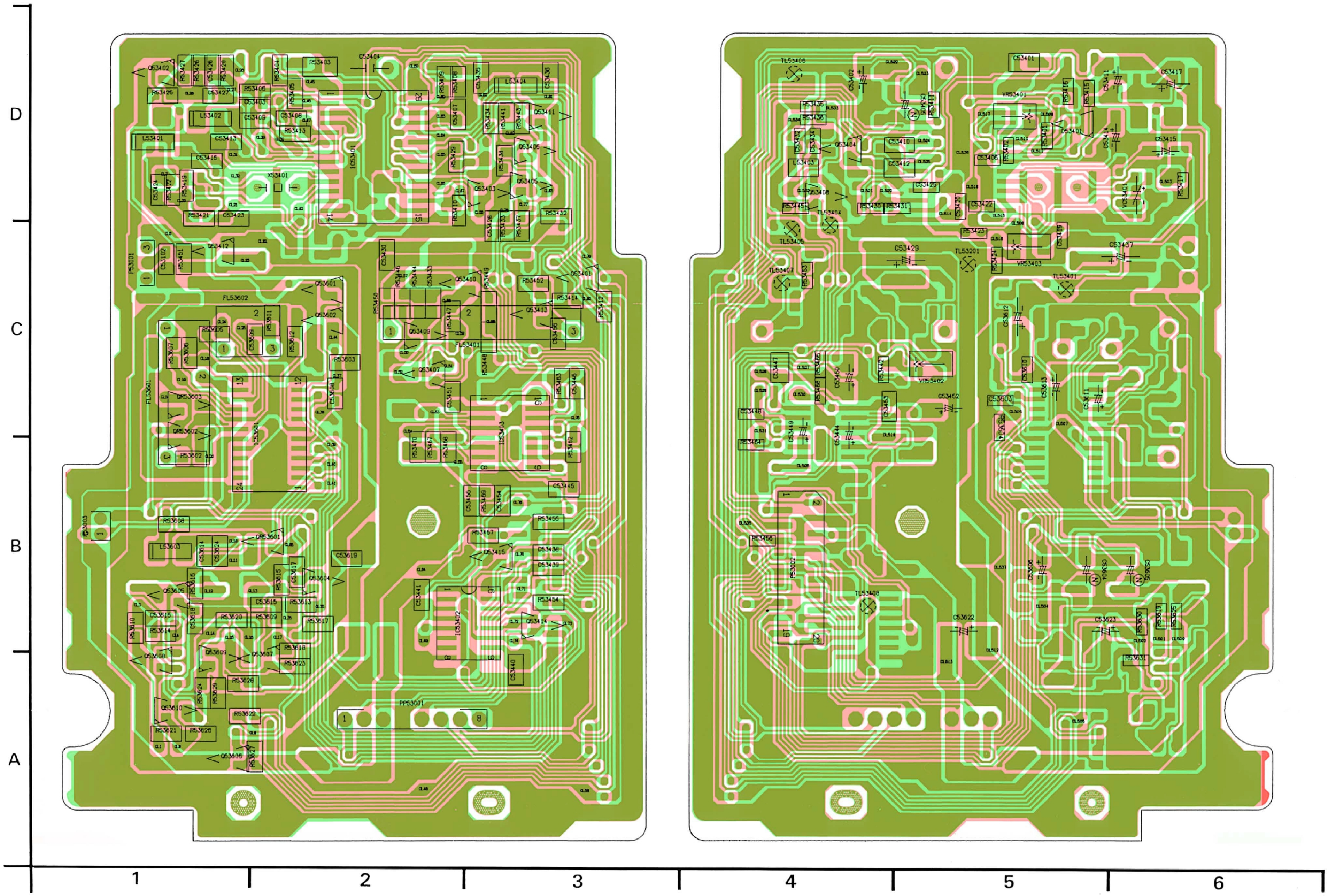

E
D
C
B
A
1
2
3
4
5
6
7
8
9
IC56102
IC56103
IC56001
IC59201
IC59202
IC59203
P59010
P58005
P59008
FL56005
TL59201

MAIN C.B.A.	
Transistors	
Q56001	B-6
Q56101	D-19
Q59201	A-12
Q59202	A-12
Q59203	A-12
Q59231	B-12
Q59232	B-11
Q59233	B-12
Q59241	B-12
Q59242	B-11
Q59243	B-12
Q59244	B-9
Q59282	C-12
Transistor-resistors	
QR56001	B-15
QR56002	A-14
QR56003	B-14
QR59001	A-18
QR59201	C-12
QR59202	C-12
QR59281	C-12
QR59282	C-12
Integrated Circuits	
IC56001	C-5
IC56002	A-6
IC56003	B-17
IC56004	D-5
IC56005	C-16
IC56006	B-14
IC56007	B-5
IC56008	B-5
IC56101	C-17
IC56102	E-2
IC56103	C-4
IC56104	B-18
IC56105	D-18
IC56106	D 17
IC59201	B-8
IC59202	B-7
IC59203	A-7
IC59504	B-6
IC59205	C-11
Test Points	
TP59001	A-18
TP59002	B-18
TL59201	D-9
X'tal OSC	
X56001	C-14
X56101	C-16
X59201	B-13
X59202	C-13
Connectors	
P59001	B-19
P59002	D-13
P59003	D-12
P59004	E-16
P59005	A-6
P59006	C-11
P59007	B-11
P59008	B-9
P59009	C-1
P59010	D-3

ADDRESS INFORMATION



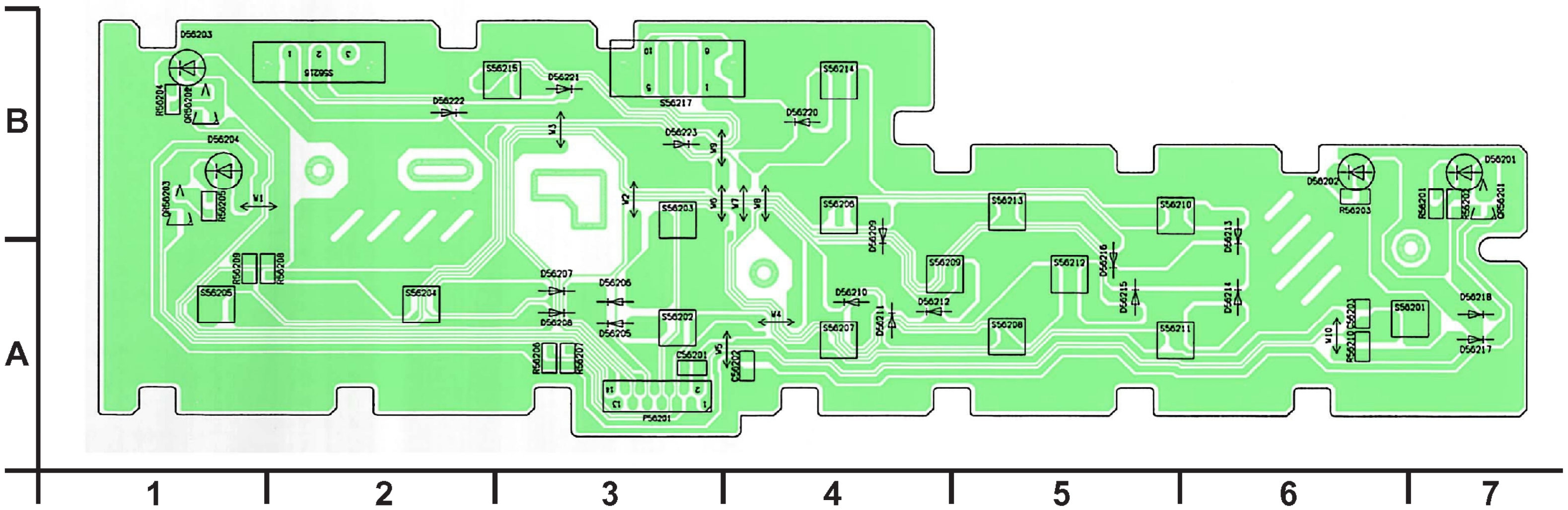
ANALOG C.B.A. (VEP93312A)



ANALOG C.B.A.	
Transistors	
Q53401	C-3
Q53402	D-1
Q53403	D-3
Q53404	D-4
Q53405	D-3
Q53406	D-3
Q53407	D-3
Q53408	D-4
Q53409	C-2
Q53410	C-3
Q53411	D-3
Q53412	C-1
Q53413	C-3
Q53414	B-3
Q53415	B-3
Q53601	C-2
Q53602	C-2
Q53604	B-2
Q53605	B-1
Q53606	A-1
Q53607	A-2
Q53608	A-1
Q53609	A-1
Q53610	A-1
Transistor-resistors	
QR53601	B-2
QR53602	C-1
QR53603	C-1
Integrated Circuits	
IC53401	D-2
IC53402	B-2
IC53403	C-3
IC53601	C-2
Test Points	
TL53201	C-5
TL53401	C-5
TL53404	D-4
TL53405	D-4
TL53406	D-4
TL53407	C-5
TL53408	C-2
Adjustments	
VR53401	D-5
VR53402	C-5
VR53403	C-5
VC53401	D-6
Connectors	
P53001	C-1
P53002	B-4
P53003	B-1
PP53001	A-2

ADDRESS INFORMATION

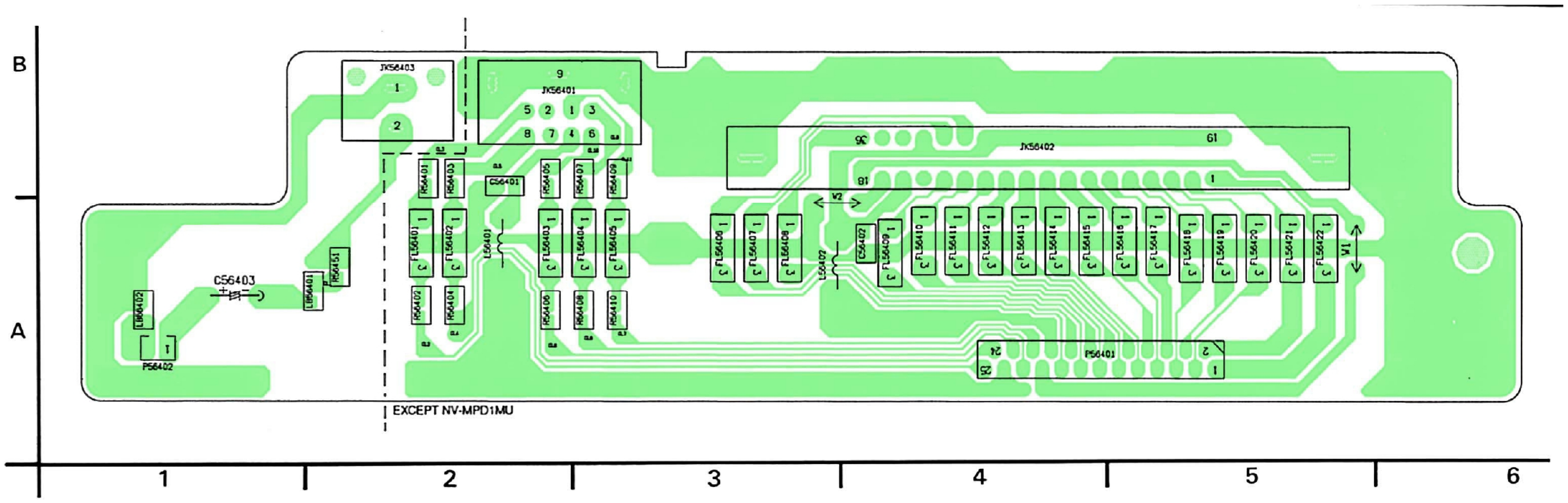
OPERATION C.B.A. (VEP90366A)


B
A
1
2
3
4
5
6
7
D56203
S56216
S56215
D56221
D56222
S56217
S56214
D56220
D56223
R56204
QR56202
D56204
QR56203
R56205
W1
W3
W2
W9
W6
W7
W8
S56203
S56206
D56209
S56213
S56210
D56213
D56202
R56203
D56201
R56201
QR56201
R56209
R56208
S56205
S56204
D56207
D56208
D56206
D56205
S56202
W4
W5
C56201
C56202
R56206
R56207
P56201
S56209
D56210
D56211
D56212
S56207
S56212
D56216
D56215
S56208
D56214
S56211
D56218
D56217
S56201
R56202
W10

OPERATION C.B.A.	
Transistor-resistors	
QR56201	B-7
QR56202	B-1
QR56203	B-1
Switches	
S56201	A-7
S56202	A-3
S56203	B-3
S56204	A-2
S56205	A-1
S56206	B-4
S56207	A-4
S56208	A-5
S56209	A-4
S56210	B-6
S56211	A-6
S56212	A-5
S56213	B-5
S56214	B-4
S56215	B-3
S56216	B-2
S56217	B-3
Connector	
P56201	A-3

ADDRESS INFORMATION

I/F CONNECTOR C.B.A. (VEP96507A FOR NV-MPD1E/B/EN) / (VEP96507C FOR NV-MPD1MU)


B
A
1
2
3
4
5
6
JK56403
JK56401
JK56402
C56403
L56402
P56402
L56401
R56451
R56401
R56403
R56402
R56404
C56401
R56405
R56407
R56409
R56406
R56408
R56410
FL56401
FL56402
FL56403
FL56404
FL56405
FL56406
FL56407
FL56408
FL56409
FL56410
FL56411
FL56412
FL56413
FL56414
FL56415
FL56416
FL56417
FL56418
FL56419
FL56420
FL56421
FL56422
C56402
L56403
W1
W2
P56401
EXCEPT NV-MPD1MU

POWER SUPPLY C.B.A. (VEP91234A)

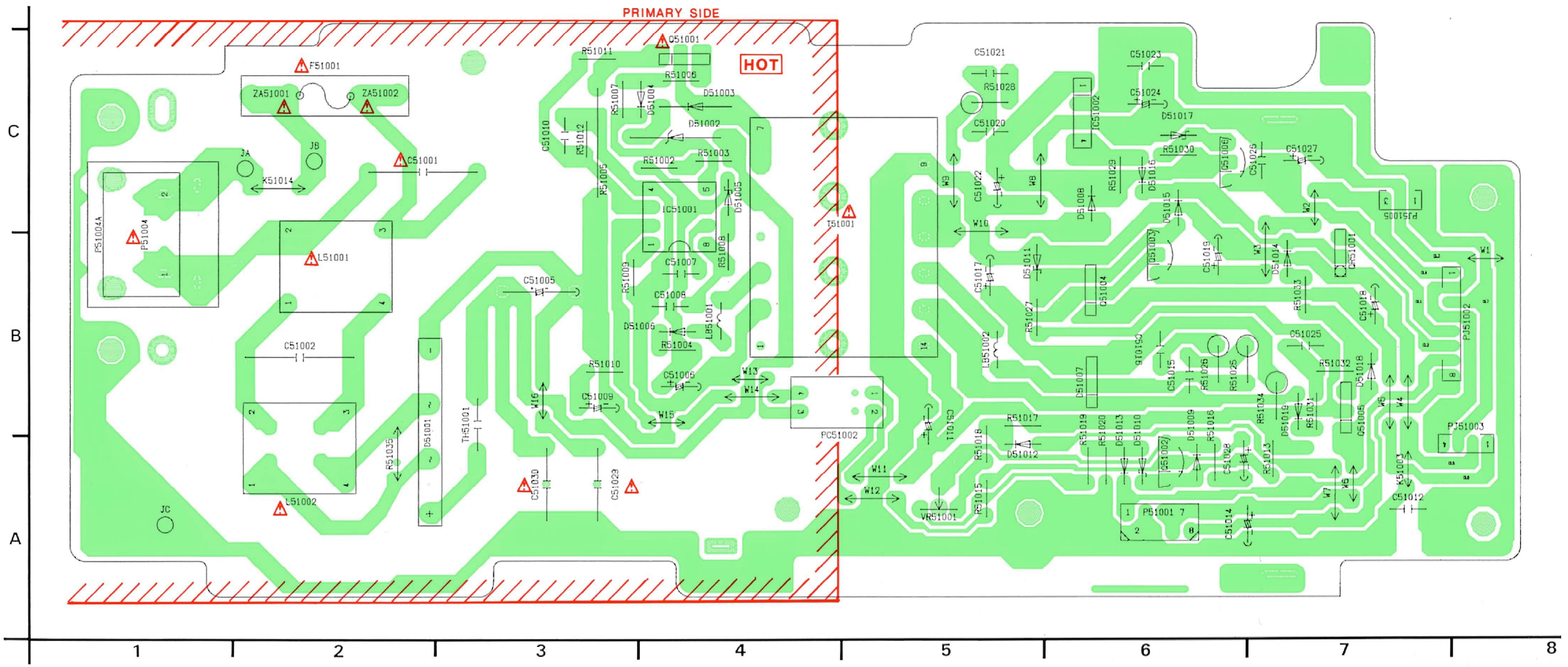
CAUTION

THE RED MARK INDICATES THE PRIMARY CIRCUIT TO DISTINGUISH THE PRIMARY FROM THE SECONDARY CIRCUIT.
PAY ATTENTION NOT TO RECEIVE AN ELECTRIC SHOCK DURING REPAIR AND SERVICE OF THE PRODUCTS.

1. Components identified with the mark ⚠ have the special characteristics for safety. When replacing any of these components, use only the same type.
2. ▨ High voltage is applied here. Pay extreme attention, when replacing.
3. When servicing, remove the power cord from the power outlet.
4. When replacing any components, confirm the correct part number with the parts list.

POWER SUPPLY C.B.A.			
Transistors		**Adjustment**	
Q51001	C-4	VR51001	A-5
Q51002	A-6	**Fuse**	
Q51003	B-6	F51001	C-2
Q51004	B-6	**Connectors**	
Q51005	B-7	P51001	A-6
Q51006	C-6	P51004	C-1
PC51002	B-5	PJ51002	B-8
Transistor-resistor		PJ51003	B-8
QR51001	B-7	PJ51005	C-7
Integrated Circuits			
IC51001	C-4		
IC51002	C-6		

ADDRESS INFORMATION



PRIMARY SIDE
HOT
C
B
A
1
2
3
4
5
6
7
8
F51001
ZA51001
ZA51002
JA
JB
JC
K51014
C51001
P51004A
P51004
L51001
C51002
L51002
R51035
D51001
TH51001
C51030
C51029
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R51011
R51006
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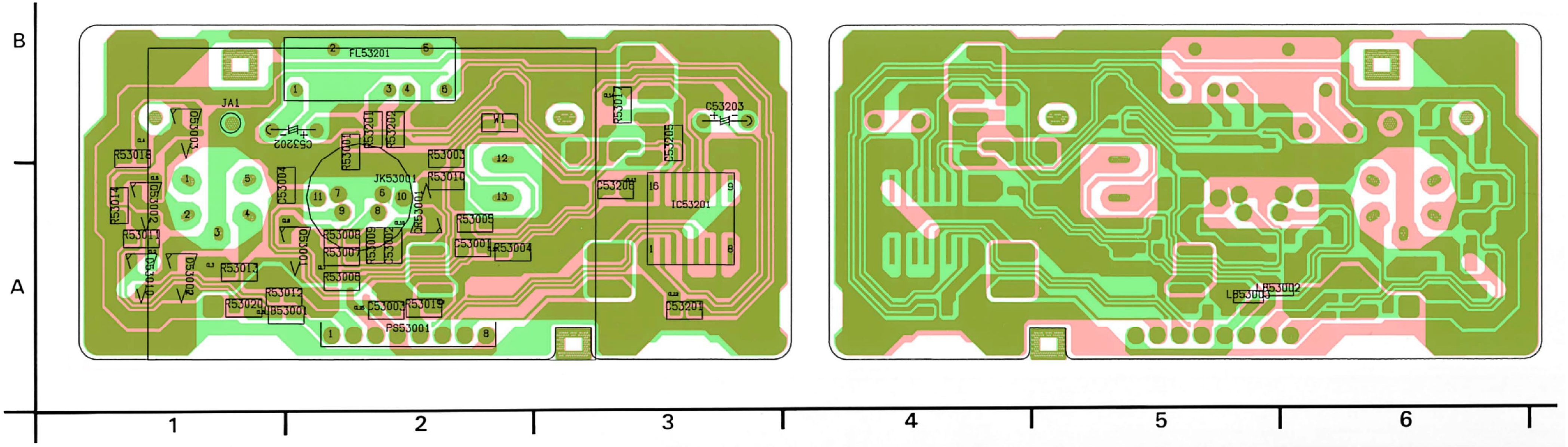
D51003
D51002
C51010
R51012
R51005
R51002
R51003
IC51001
D51005
C51007
R51008
C51008
R51009
D51006
R51004
LB51001
R51010
C51009
C51006
W13
W14
W15
W16
T51001
PC51002
W11
W12
VR51001
R51015
R51018
C51011
C51021
R51028
C51020
C51022
W9
W8
W10
C51017
D51011
R51027
LB51002
C51016
C51004
D51008
IC51002
R51029
C51023
C51024
D51017
R51030
D51016
D51015
C51003
C51019
C51026
C51027
W2
W3
D51014
R51033
PJ51005
QR51001
W1
C51018
PJ51002
C51025
R51032
D51018
C51015
R51026
R51025
D51007
R51017
D51012
R51019
R51020
D51013
D51010
D51009
R51016
C51002
C51028
R51034
R51013
D51019
R51031
Q51005
W5
W4
W6
W7
PJ51003
K51003
C51012
P51001
C51014

VIDEO JACK C.B.A. (VEP93302F)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A
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3
4
5
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FL53201
JA1
C53202
C53203
R53201
R53202
R53001
R53003
R53010
JK53001
W1
R53017
C53205
C53206
IC53201
R53018
R53014
D53003
D53002
C53004
R53011
D53001
R53008
R53007
R53009
C53002
QR53001
R53005
C53001
R53004
R53013
D53010
D53004
R53006
R53012
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C53003
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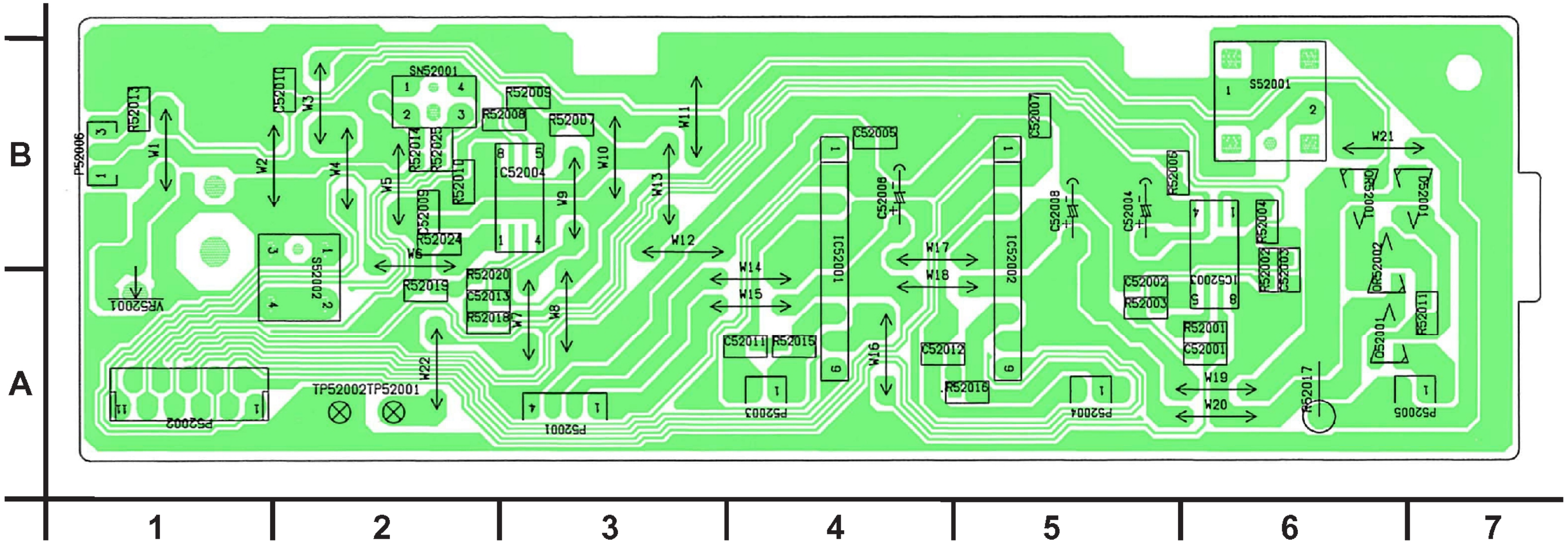
LB53003
LB53002

MOTOR DRIVE C.B.A. (VEP92405A)

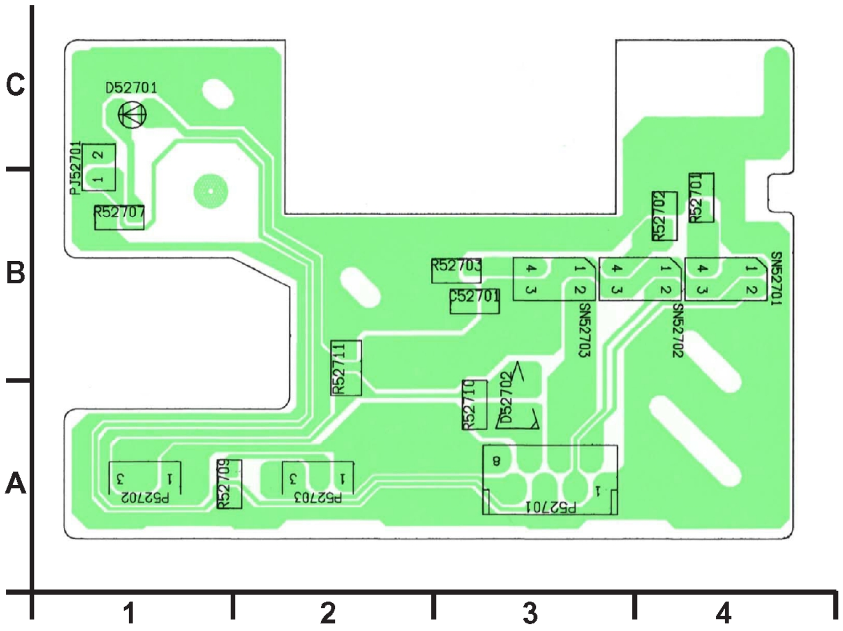

B
A
1
2
3
4
5
6
7
P52006
R52013
C52011
W1
W2
W3
W4
W5
W6
SN52001
R52009
R52008
R52007
R52014
R52025
R52010
C52004
C52009
R52024
S52002
VR52001
R52019
R52020
C52013
R52018
W7
W8
W9
W10
W11
W12
W13
W14
W15
C52005
C52006
IC52001
C52011
R52015
P52003
P52001
P52002
TP52002
TP52001
W22
W16
W17
W18
C52007
C52008
IC52002
C52012
R52016
C52004
R52006
IC52003
C52002
R52003
R52001
C52001
R52004
R52002
C52003
W19
W20
P52004
S52001
W21
QR52001
QR52002
Q52001
R52011
R52017
P52005

MOTOR DRIVE C.B.A.			
Transistors		Test Points	
Q52001	A-6	TP52001	A-2
SN52001	B-2	TP52002	A-2
Transistor-resistors		Adjustment	
QR52001	B-6	VR52001	A-1
QR52002	B-6	Switches	
Integrated Circuits		S52001	B-6
IC52001	B-4	S52002	B-2
IC52002	B-5		
IC52003	B-6		
IC52004	B-3		

ADDRESS INFORMATION

CASSETTE SENSOR C.B.A. (VEP90337A) / I CASSETTE SWITCH C.B.A. (VEP90334A) / SHEET SENSOR C.B.A. (VXQ0593) / P. CASSETTE SWITCH C.B.A. (VEP90365A) / P CHECK SENSOR C.B.A. (VEP90335A) / P. OUT SENSOR C.B.A.)VEP90347A) / FG SENSOR C.B.A. (VEP90336A)

CASSETTE SENSOR C.B.A.


C
B
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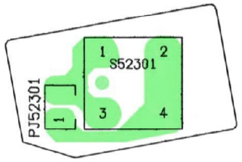
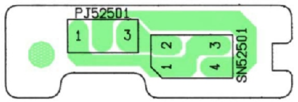
2
3
4
D52701
PJ52701
R52707
R52703
C52701
R52702
R52701
SN52701
SN52702
SN52703
R52711
R52710
D52702
R52709
P52701
P52702
P52703

P CASSETTE SWITCH C.B.A.


S52301
PJ52301
1
2
3
4

P CHECK SENSOR C.B.A.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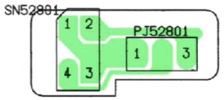
SN52501
1
2
3
4

P. OUT SENSOR C.B.A.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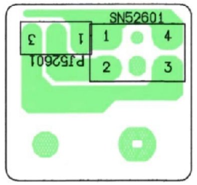
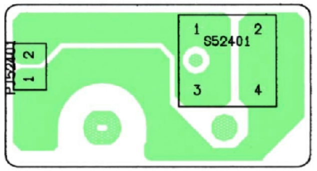
PJ52801
1
2
3
4

FG SENSOR C.B.A.


SN52601
PJ52601
1
2
3
4

I CASSETTE SWITCH C.B.A.


S52401
PJ52401
1
2
3
4

SHEET SENSOR C.B.A.